

Annual Comprehensive Financial Report

For the Fiscal Year Ended June 30, 2022

OREGON PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM



**Oregon Public Employees
Retirement System**

An Agency of the
State of Oregon



Front Cover Photo: Port Orford Heads State Park
Taken by: Radford Bean

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Annual Comprehensive Financial Report

For the Fiscal Year Ended June 30, 2022

Oregon Public Employees Retirement System

An Agency of the State of Oregon

Kevin Olineck

Director

Richard Horsford

Chief Financial Officer

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INTRODUCTORY SECTION

Photo: Dorena Covered Bridge
Taken by: Radford Bean

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Oregon

Kate Brown, Governor

Public Employees Retirement System

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December 1, 2022

Public Employees Retirement Board
Oregon Public Employees Retirement System
11410 SW 68th Parkway
Tigard, Oregon 97223

We are pleased to submit the Annual Comprehensive Financial Report (ACFR) of the Oregon Public Employees Retirement System (PERS, System or Agency) for the fiscal year ended June 30, 2022. This report includes all funds over which the Public Employees Retirement Board (Board) exercises authority. These funds were established to provide retirement, death, and disability benefits and other postemployment benefits (OPEB) to members; administer retiree health insurance programs; and oversee the state-sponsored deferred compensation program. As of June 30, 2022, PERS provides services to 898 employers and more than 393,000 active, inactive, and retired members and beneficiaries.

The ACFR is intended to fulfill the legal requirements of Oregon Revised Statute (ORS) 238.630. PERS management is responsible for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures.

Macias Gini & O'Connell LLP (MGO) has audited the accompanying financial statements in accordance with generally accepted auditing standards and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. The independent auditor's report is included in this report.

Management's Discussion and Analysis

Included in this report is a section entitled Management's Discussion and Analysis (MD&A). This section provides a narrative introduction, overview, and analysis to accompany the basic financial statements. The letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. We would like to direct your attention to the MD&A that begins on page 20.

Financial Information

The financial statements contained in this report have been prepared in accordance with accounting principles generally accepted in the United States of America, also known as generally accepted accounting principles (GAAP) as set forth in the principles established by the Governmental Accounting Standards Board (GASB), including all effective GASB pronouncements, and in conformance with the guidelines for financial reporting developed by the Government Finance Officers Association of the United States and Canada (GFOA).

Management of the System assumes full responsibility for the completeness and reliability of all of the information presented in this report. To provide a reasonable basis for making these representations, management of the System has established internal controls designed to protect the System's assets from loss, theft, or misuse, and to compile sufficient reliable information for the preparation of the included financial statements. Because the cost of internal controls should not exceed their effectiveness, management has developed controls that provide reasonable, rather than absolute, assurance that the financial statements contained in this report will be free of material misstatements. As management, we assert that, to the best of our knowledge and belief, this financial report is complete and reliable in all material aspects.

Factors Affecting Economic Condition

The economic condition of the System is primarily affected by investment earnings. A comparative analysis of investment rates of return is presented on page 31 of this report.

Funding

The System is funded through contributions and investment earnings. For judges, the contribution is set at 7.0% of covered salary. Employer contributions are established by actuarial valuations conducted biennially in odd-numbered calendar years. The System's funding objective is to meet long-term benefit promises through contributions that fund benefits as they accrue. An adequate contribution level, when combined with investment earnings, will result in the full funding of benefits as they come due. If the level of funding is adequate, the ratio of assets accumulated to total liabilities will increase, and more income will be available for investment. Prudent investment of assets, and returns on those investments, may increase the funding base and allow for a more stable employer contribution rate. As of the December 31, 2021, actuarial valuation, the System has a funded ratio of 86.4% for the defined benefit pension plan it administers, including employer side accounts, and 79.6% funded ratio, excluding employer side accounts.

All members, with the exception of judges, contribute 6.0% of salary to the Individual Account Program (IAP), an individual account-based program under the PERS tax-qualified governmental plan for all PERS members, established in 2004. Beginning July 1, 2020, Senate Bill 1049 required a portion of most member contributions to their IAP accounts be redirected to their new Employee Pension Stability Account (EPSA) to help fund the cost of their future pension benefits. For Oregon Public Service Retirement Plan (OPSRP) members, the redirected amount is 0.75% of their IAP contribution and for Tier One and Tier Two members, the redirected amount is 2.5% of their IAP contribution. In 2021, only members who earned more than \$3,333 a month were subject to a portion of their IAP contributions being redirected to the EPSA.

Investments

The Oregon Investment Council (OIC) has statutory authority (ORS 293.701) to establish policies for the investment and reinvestment of the System's funds. The System's long-term investment strategy is designed to capitalize on investment return while protecting principal. The OIC works to strategically allocate assets in the System's portfolio. The target investment portfolio mix at fair value as of June 30, 2022, was 30.0% public equity, 20.0% private equity, 20.0% debt securities, 12.5% real estate, 7.5% real assets, 7.5% diversifying strategies, and 2.5% risk parity. In addition to approved asset classes, target asset allocation ranges, and rebalancing policies, the OIC further safeguards the System's investment portfolio through use of an independent custodian, defined limits on delegated authority, and independent audits. The OIC uses external portfolio managers, employing both passive (indexed) and active investment strategies. The portfolio is broadly diversified among equities, debt securities, real estate, and private equities, with additional diversification achieved through domestic and international investing. System securities are held by State Street Bank and Trust Company.

The System's Regular Investment Portfolio (Portfolio) experienced in fiscal year 2022 a rate of return of 6.3%. This compares with a rate of return of 25.5% for fiscal year 2021. The Portfolio's trailing 10-year return was 9.3%. Descriptions of OIC policies regarding diversification, performance objectives, fees, and asset allocation are found on page 102.

Major Initiatives

Senate Bill 1049 (SB 1049)

SB 1049 was signed into law by the governor on June 11, 2019. The challenge for PERS has been to not only implement this bill, but also continue to provide our members and employers with uninterrupted service while working through the intricacies of implementing SB 1049.

The Agency developed an overall implementation approach to tackle each element of SB 1049. This approach is to manage this as one comprehensive program with the following five individual projects:

<u>Project</u>	<u>Effective Date</u>
Employer Programs	7/1/2019
Salary Limit	1/1/2020
Work After Retirement	1/1/2020
Member Redirect	7/1/2020
Member Choice	1/1/2021

As of June 30, 2022, PERS fully finished and closed the Employer Programs and Salary Limit projects. The Member Choice project was closed in August 2021. Work completed on the Work After Retirement project in February 2022, and the Member Redirect project has an expected completion date of April 2024. PERS also initiated a new project, Technical Debt, to address some technical debt issues that arose as a result of project implementations. PERS received funding for these projects for the 2021-23 biennium.

Strategic Management System

PERS continues to evolve its outcome-based management system (POBMS) to improve operational performance and organizational alignment. This process-based system integrates problem solving and decision making with active engagement from the front-line staff who perform daily work.

The 2018-23 PERS Strategic Plan was updated during the year to reflect six strategic priorities. Each priority has several areas of focus and specific, achievable goals and objectives. The six strategic priorities are:

1. Organizational Management and Development
2. Member Services and Communications
3. Data Reliability
4. Information Governance, Security, and Technology
5. Financial Management
6. Enterprise Risk Management

For each of the strategic priorities, PERS is using existing strategic and operational planning functions to prioritize and allocate resources. Strategies are being implemented using a variety of methods. The methods include problem solving, project management, breakthrough initiatives, and integration into core business practices. Specific performance metrics have been identified for tracking.

Supporting the Agency's strategic priorities are six core operating processes and six core supporting processes. Each process has an owner, sub-processes, and outcome measures to monitor and document progress. Quarterly target review meetings are held to review progress and identify areas for improvement.

More information on the 2018–2023 PERS Strategic Plan can be found on our website at:

<https://www.oregon.gov/pers/Documents/Strategic-Plan.pdf>.

Information Security and Continuity Management Programs

The Agency has established a Continuity Management Program, which encompasses our Continuity of Operations Plan, Business Recovery, and Disaster Recovery Plans. That said, there is recognition that, while we now have the basics in place, there is still significant effort required to ensure that we continue to enhance our Continuity Management Program.

Similar to Continuity Management, Information Security is one of the foundational initiatives the Agency has in place. This ensures that the data and personal information we maintain are secure. Working collaboratively with the State Enterprise Security Office, staff made significant strides in enhancing our Information Security Program in fiscal year 2022.

Member and Employer Satisfaction Surveys

PERS' 2022 Member Satisfaction Survey results show a slight increase in member satisfaction from 2021, continuing the trend of higher satisfaction during years when the Legislature is not in regular session. Overall quality of service was rated at 85.1% in 2022, up from 83.6%. This year was the first time that the survey was disseminated solely via digital channels without the print edition of the *Perspectives* newsletter. Retiree satisfaction also increased, with more than 98.0% rating PERS' overall quality of service as "excellent" or "good." Nonretired member satisfaction came back at a 72.2% overall satisfaction rate.

Employers reported a satisfaction rating of nearly 86.0% in 2022, up from 85.1% in 2021. We received 76.0% more responses on the employer survey than in 2021, with more than 500 responses.

Awards and Acknowledgements

Certificate of Achievement

The Certificate of Achievement for Excellence in Financial Reporting is applicable for the year ended June 30, 2021. The Certificate of Achievement is a prestigious national award presented by the Government Finance Officers Association (GFOA) that recognizes conformance to the highest standards of preparation of state and local government financial reports.

To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized ACFR, whose contents conform to program standards. The ACFR must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is

valid for one year. The System has received a Certificate of Achievement for the last 31 consecutive years. We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to the GFOA.

Public Pension Standards Award

The Public Pension Coordinating Council (PPCC) awarded the 2022 Public Pension Standards Award to PERS for its plan design and administration.

The PPCC is a coalition of three associations representing public pension funds covering the vast majority of public employees in the United States. The associations are as follows: the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR). Public pension standards are intended to reflect minimum expectations for public retirement system management and administration. They also serve as benchmarks by which all defined benefit public plans are measured.

This is the 20th year the PPCC has offered the award to public retirement systems and the 19th consecutive year PERS has applied for, and received, the award.

Acknowledgments

The information contained in this report is used to make management decisions, to demonstrate stewardship of the assets entrusted to the System, and to comply with legal and accounting provisions. Staff strives to provide reliable and complete information for these purposes. The compilation of this report reflects the combined efforts of the PERS Financial Services Division.

This report is available on the PERS website at <https://www.oregon.gov/pers/Pages/Financials/Actuarial-Financial-Information.aspx>, and a link to this document is e-mailed to all PERS employers. Summary financial information and the website link are also reported in the PERS newsletter, *Perspectives*, which is distributed to active and retired members.

We would like to thank the PERS Board and staff, participating employers, the Oregon Investment Council, the Office of the State Treasurer, and all others working on behalf of the System for their time, commitment, support, and hard work. We are grateful for their continued support and assistance.

Respectfully submitted,



Kevin Olineck
Director



Richard Horsford
Chief Financial Officer

Public Employees Retirement Board

The Oregon Legislature has delegated authority to the Public Employees Retirement System (PERS) Board of Trustees (Board) to administer the PERS system. The board is composed of five trustees who administer retirement (service and disability), death, and retiree health insurance benefits. PERS also administers the Oregon Savings Growth Plan (OSGP), a deferred compensation program for state and local government employees.

All members of the PERS Board are appointed by the state governor and confirmed by the state senate. The governor designates the chairperson.

Statute specifies that PERS Board membership must consist of three people with experience in business management, pension management, or investing who are not members of the PERS system; one person who is either an employee of the state in a management position or a person who holds an elective office in the governing body of a participating public employer other than the state; and one person representing public employees and retirees.

As of June 30, 2022, the three PERS Board members representing business management, pension management, or investing are Sadhana Shenoy (Board Chair), Stephen Buckley, and Jardon Jaramillo. John Scanlan was appointed to represent public employees and retirees; Lawrence J. Furnstahl (Vice-Chair) was appointed to represent public employers. Terms for each member are staggered.

Sadhana Shenoy (Board Chair)

Sadhana Shenoy has spent more than five years in the mobility as a service (MaaS) space. She was the Chief Financial Officer and Chief Operations Officer of Moovel, a transit technology company, and she held this position as the company developed from start-up to acquisition and into growth. She started her career as a software engineer working with databases and children's software. She then moved to the nonprofit sector, working on boards within the environmental (Sierra Club), educational (Montessori School of Beaverton), and legal (CRAG Law Center) areas. Ms. Shenoy is a charter and board member of TiE Oregon (The Indus Entrepreneurs) and of TYE Oregon (TiE Youth Entrepreneurs). She enjoys angel investing in exciting new ideas and promoting youth entrepreneurship.

Ms. Shenoy holds Bachelor of Science degrees in accounting and business administration and a Master of Science degree in computer science. She is a Certified Public Accountant (CPA) in Oregon.

Lawrence J. Furnstahl (Vice-Chair)

Lawrence J. Furnstahl has nearly four decades of experience in the strategic, financial, and operational management of complex organizations, including universities and academic health centers. Mr. Furnstahl has served as a chief financial officer for more than 25 years. He is now the Executive Vice President and Chief Financial Officer of Oregon Health & Science University (OHSU). OHSU is a \$3.7 billion public corporation with nearly 3,000 faculty, 17,500 staff, and 4,000 students and trainees. OHSU participates in \$500 million of research and is the state's only major academic health center. Prior to joining OHSU in January 2011, Mr. Furnstahl served as Chief Financial and Strategy Officer with the University of Chicago Medical Center and Biological Sciences Division. Over the years, he has also served as Vice President of Financial Planning for Science for University of Chicago; Senior Vice President and Chief Financial Officer for University of California, San Francisco, Stanford Health Care; Vice President and Chief Financial Officer for the University of Chicago; and Vice President and Treasurer of Patient Services for the University of Chicago Hospitals. Mr. Furnstahl is a member of the Visiting Committee to the Physical Sciences Division of the University of Chicago and a board director and former Chair of the Hyde Park Art Center. He is a graduate of the College of the University of Chicago, with a degree in economics.

Stephen Buckley

Stephen Buckley was a partner at the Portland, Oregon law firm Brownstein Rask LLP prior to his retirement on June 30, 2019. For more than 30 years, Mr. Buckley served as legal counsel for boards of trustees of private sector health and welfare plans and defined benefit, defined contribution, and 401(k) pension plans in Washington, Oregon, and California. Mr. Buckley was a frequent speaker at employee benefit plan conferences sponsored by the International Foundation of Employee Benefit Plans. Mr. Buckley earned his Bachelor of Arts degree in political science from Colorado State University and his Juris Doctorate degree from Willamette University College of Law.

John Scanlan

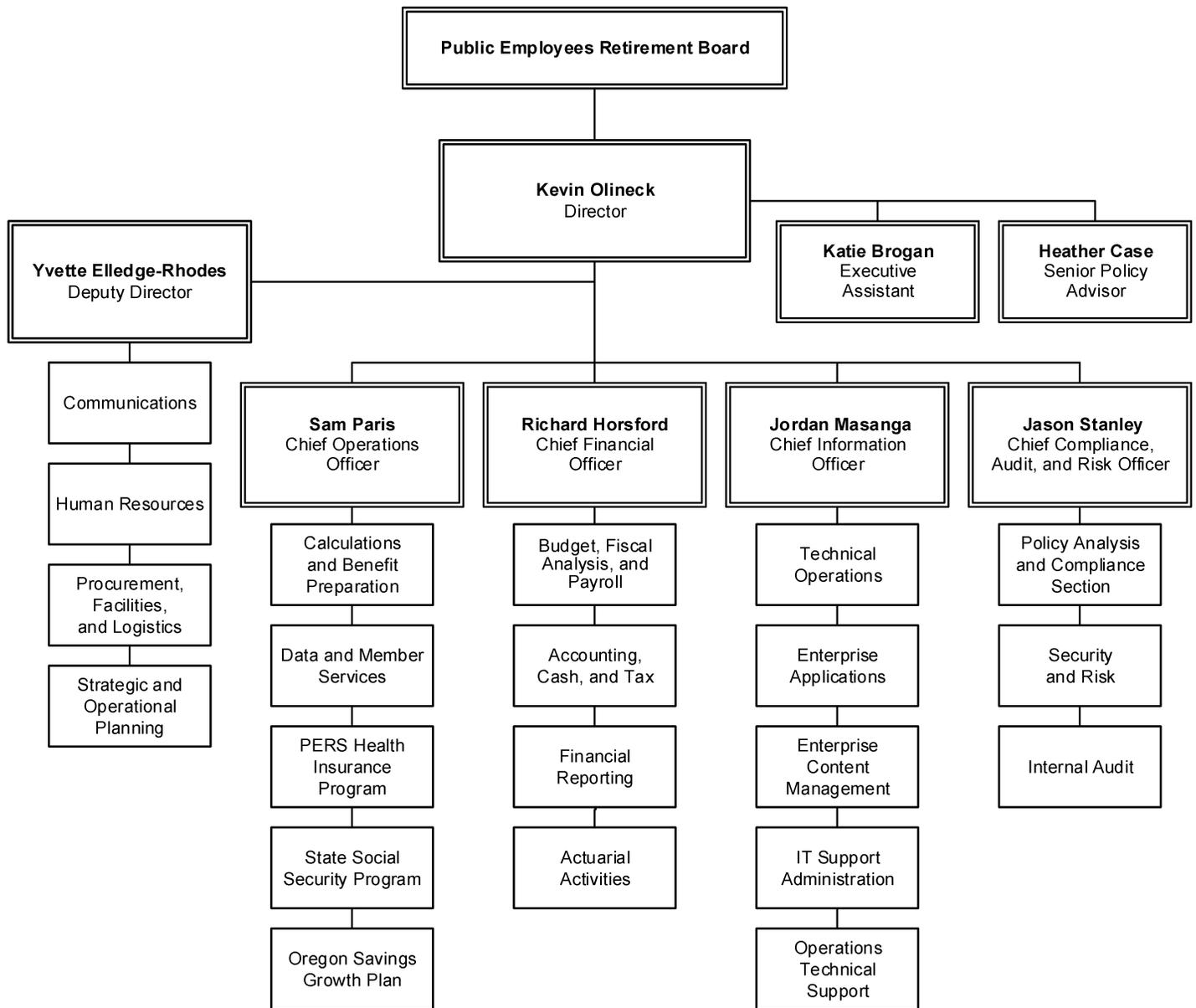
John Scanlan was a teacher for 29 years and retired in 2021. He taught English language arts to students in grades 6 to 12 in three districts; was an adjunct professor at Eastern Oregon University (EOU); co-directed the Oregon Writing Project at EOU; and coordinated the Pendleton School District Outdoor School, the longest continuously operating outdoor school program east of the Cascades. Mr. Scanlan also served as president of the Oregon Council of Teachers of English, frequently presented at council conferences, and has been published in the council's peer-reviewed *Oregon English Journal*. He has been active in the Oregon Education Association, including serving as a local building representative, treasurer, negotiation team leader, president, and board member.

Jardon Jaramillo

Jardon Jaramillo serves as Senior Director of Investor Relations, Treasury, and Risk Management at Portland General Electric, communicating and managing financial results. He previously worked as Director of Compensation and Benefits from 2013 to 2016. As director, he was responsible for managing the company's defined benefit pension plan as well as overseeing health care programs for all of PGE's employees. Before joining PGE, Mr. Jaramillo was a manager with Deloitte in the M&A Transactions Services consulting group. He spent his early career at Deloitte in the audit and assurance space. Mr. Jaramillo enjoys contributing to solutions to equity issues in the community and serves as Vice Chair of the Board of Metropolitan Family Services.

Mr. Jaramillo received an MBA from the Anderson School at the University of California, Los Angeles, a BA in economics from Northwest Nazarene University, and is a CPA licensed in Oregon.

Organization Chart



Oregon Public Employees Retirement System Consultants

Actuary

Milliman, Inc.

Legal Counsel

Oregon Department of Justice

Auditor

Macias Gini & O'Connell LLP

Insurance Consultant

Butler Partners & Associates LLC

Medical Advisor

F. William Miller, MD

Investments

Investment managers are reported in the Schedule of Fees and Commissions on page 106.



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

Oregon Public Employees Retirement System

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO

Management would like to offer a special thank you to the Oregon Public Employees Retirement System Financial Reporting Division for their ongoing work to earn this prestigious award.

Financial Reporting Manager – Matthew Graves

Senior Investment Accountant – Michiru Farney

Financial Reporting Coordinator – Pat Donegan



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2022***

Presented to

Oregon Public Employees Retirement System

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

A handwritten signature in cursive script, reading "Alan H. Winkie".

Alan H. Winkie
Program Administrator



Mission

We serve the people of Oregon by administering public employee benefit trusts to pay the right person the right benefit at the right time.



Core Values

Service-Focus: We work together to meet the needs of others with dependability, professionalism, and respect.

Accountability: We take ownership for our decisions, actions, and outcomes.

Integrity: We inspire trust through transparency and ethical, sound judgment.



Operating Principles

Professional: We are responsive, respectful, and sensitive to the needs of our members, employers, and staff.

Accurate: We ensure data integrity and provide consistent, dependable information and benefits.

Judicious: We use sound judgment and prudent, principled decision-making in upholding our fiduciary responsibility.

Information Security: We are constantly vigilant to safeguard confidential information.



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FINANCIAL SECTION



Photo: North Falls
Taken by: Radford Bean

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Independent Auditor's Report

To the Honorable Kate Brown
Governor of Oregon

To the Public Employees Retirement Board of the
Oregon Public Employees Retirement System
Tigard, Oregon

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the fiduciary activities and proprietary activities of the Oregon Public Employees Retirement System (the System), an agency of the State of Oregon, as of and for the fiscal year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the respective financial position of the fiduciary activities and proprietary activities of the Oregon Public Employees Retirement System, as of June 30, 2022, and the respective changes in financial position, and, where applicable, cash flows thereof for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States (*Government Auditing Standards*). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Other Matter

Prior-Year Comparative Information

The financial statements include partial prior-year comparative information. Such information does not include all of the information required to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements for the fiscal year ended June 30, 2021, from which such partial information was derived.

Report on Partial Comparative Information

We have previously audited the System's 2021 financial statements, and we expressed unmodified audit opinions on the financial statements in our report dated December 1, 2021. In our opinion, the partial comparative information presented herein as of and for the fiscal year ended June 30, 2021, is consistent, in all material respects, with the audited financial statements from which it was derived.

Responsibilities of Management for the Financial Statements

The System's management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the schedule of changes in net pension liability/(asset) and related ratios – defined benefit pension plan, the schedule of investment returns – defined benefit pension plan, the schedule of defined benefit pension plan employer contributions, the schedule of changes in net OPEB (asset) and related ratios – OPEB Plan – RHIA, the schedule of investment returns – OPEB Plan – RHIA, the schedule of changes in net OPEB liability/(asset) and related ratios – OPEB Plan – RHIPA, the schedule of investment returns – OPEB Plan – RHIPA, the schedule of OPEB RHIA employer contributions, the schedule of OPEB RHIPA employer contributions, and the schedule of claims development information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The schedule of plan net position – defined benefit pension plan, the schedule of changes in plan net position – defined benefit pension plan, the schedule of administrative expenses – all funds, the schedule of payments to consultants and contractors, and the summary of investment fees, commissions, and expenses (supplementary information) are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the supplementary information, is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

The System's management is responsible for the other information included in the annual report. The other information comprises the introductory, investment, actuarial, and statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 1, 2022, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Macias Gini & O'Connell LLP
Sacramento, California
December 1, 2022

MANAGEMENT'S DISCUSSION AND ANALYSIS

This section presents management's discussion and analysis of the Oregon Public Employees Retirement System's (PERS or the System) financial performance during the fiscal year ended June 30, 2022. It is a narrative overview and analysis that we present in conjunction with the Letter of Transmittal included in the Introductory Section of this Annual Comprehensive Financial Report (ACFR). It should also be read in conjunction with PERS' basic financial statements, as presented in this report.

PERS is primarily responsible for administering retirement benefits, health insurance benefits, and supplemental retirement savings plans. PERS comprises six funds: a defined benefit pension plan, an individual account-based program under the PERS tax-qualified governmental plan, two other postemployment benefit (OPEB) plans, a deferred compensation plan, and a proprietary fund.

OVERVIEW OF THE FINANCIAL STATEMENTS AND ACCOMPANYING INFORMATION

Management's discussion and analysis provides an introduction to and overview of the basic financial statements, which comprise the following components: Fund Financial Statements and Notes to the Financial Statements. Collectively, this information presents the combined net position restricted for pension benefits, OPEB, the individual account-based program, and deferred compensation, along with the unrestricted net position of the proprietary fund administered by PERS as of June 30, 2022. It also summarizes the combined changes in net position restricted for pension benefits, other employee benefits and OPEB, the changes in unrestricted net position, and the cash flows of the proprietary fund for the year then ended, along with an actuarial measurement of the employers' total pension and OPEB liabilities compared to the fiduciary net position of the defined benefit pension and OPEB plans. The information available in each of these sections is briefly summarized below.

Fund Financial Statements

As of June 30, 2022, financial statements are presented for the two types of funds administered by PERS: fiduciary funds, where PERS acts in a fiduciary capacity as a trustee for others and is responsible for administering the assets placed under its control; a custodian for assets held in a custodial capacity, and administers a proprietary fund, where fees are charged for services provided and the focus is on determining financial position, operating and non-operating income, changes in net position, and cash flows.

Fiduciary funds include the Defined Benefit Pension Plan, Oregon Public Service Retirement Plan Individual Account Program (IAP), the Retirement Health Insurance Account (RHIA), the Retiree Health Insurance Premium Account (RHIPA), and the deferred compensation plan, known as the Oregon Savings Growth Plan (OSGP). Fiduciary funds are used to account for resources held for the benefit of PERS participants. A statement of fiduciary net position and a statement of changes in fiduciary net position are presented for the fiduciary funds as of and for the fiscal year ended June 30, 2022, along with comparative total information as of and for the fiscal year ended June 30, 2021. These financial statements reflect the resources available to pay benefits to retired members and other beneficiaries as of year-end, as well as the changes in those resources during the year.

Proprietary fund includes the Standard Retiree Health Insurance Account (SRHIA), an enterprise fund. A statement of net position; a statement of revenues, expenses, and changes in net position; and a statement of cash flows are presented for the proprietary fund as of and for the fiscal year ended June 30, 2022, along with comparative total information as of and for the fiscal year ended June 30, 2021. These financial statements reflect the net position, changes in net position, and cash flows resulting from PERS business-type activities.

Notes to the Basic Financial Statements

- Note 1 – provides a summary of significant accounting policies, including the basis of accounting for each of the fund types: investment accounting policies, management's use of estimates, and other significant accounting policies.
- Note 2 – provides a general description of PERS as well as a description of each of the funds administered by PERS. Information regarding employer and member participation in the pension and OPEB plans administered by PERS is also provided.
- Note 3 – provides information on the System's accounts receivables and payables.
- Note 4 – provides information on cash and cash equivalents. The note also describes investments, including the techniques and inputs used to determine fair value, investing authority, investment risk categorizations, and additional information about unfunded investment commitments, securities lending, and derivatives.
- Note 5 – provides information about capital assets used in plan operations.
- Note 6 – provides information on reserves.
- Note 7 – provides information on potential contingencies of PERS.
- Note 8 – provides information on the estimated claims liability of the SRHIA.
- Note 9 – provides information on the Employers' Net Pension Liability.
- Note 10 – provides information on Employers' Net OPEB (Asset).
- Note 11 – provides information on subsequent events.

Required Supplementary Information

In addition to the financial statements and notes explained above, this ACFR includes 10 additional Required Supplementary Information schedules with historical trend information, as described below:

- The Schedule of Changes in Net Pension Liability/(Asset) and Related Ratios, page 76, presents the pension plan's change in total pension liability, change in the fiduciary net position, net pension liability, fiduciary net position as a percentage of the total pension liability, total covered payroll, and net pension liability as a percentage of covered payroll. This required 10-year trend schedule will disclose future years prospectively, beginning with the fiscal year ended June 30, 2014.
- The Schedule of Investment Returns – Defined Benefit Pension Plan, page 76, presents for each fiscal year the annual money-weighted return (internal rate of return) on pension plan investments, net of pension plan investment expense. This required 10-year trend schedule will disclose future years prospectively, beginning with the fiscal year ended June 30, 2014.
- The Schedule of Defined Benefit Pension Plan Employer Contributions, on pages 77 and 78, contains a 10-year schedule comparing the amount of actuarially determined contributions with the amount of contributions recognized in relation to the actuarially determined contributions, and showing whether there is a contribution deficiency or excess. The schedule also shows the amounts of contributions recognized by the pension plan in relation to the actuarially determined contributions as a percentage of covered payroll.
- The Schedules of Changes in Net OPEB Liability/(Asset) and Related Ratios for RHIA is on page 79 and for RHIPA on page 80 presents the OPEB plan's change in the total OPEB liability, change in the fiduciary net position, net OPEB liability/(asset), fiduciary net position as a percentage of the total OPEB liability, total covered payroll, and net OPEB liability/(asset) as a percentage of covered payroll. These required 10-year trend schedules will disclose future years prospectively, beginning with the fiscal year ended June 30, 2017.

- The Schedules of Investment Returns – OPEB Plans, for RHIA and RHIPA, on pages 79 and 80, respectively, present for each fiscal year the annual money-weighted return (internal rate of return) for each of the OPEB plan investments, net of OPEB plan investment expense. These required 10-year trend schedules will disclose future years prospectively, beginning with the fiscal year ended June 30, 2017.
- The Schedules of OPEB Plan Employer Contributions for both RHIA and RHIPA, on pages 81 through 84, contain a 10-year schedule comparing the amount of actuarially determined contributions with the amount of contributions recognized in relation to the actuarially determined contributions. They also indicate whether there is a contribution deficiency or excess. The schedules also show the amounts of contributions recognized by the OPEB plans in relation to the actuarially determined contributions as a percentage of covered payroll.
- The Schedule of Claims Development Information for SRHIA on page 85, shows earned revenues and expenses over the past ten years.

Other Supplementary Information

In addition to the Required Supplementary Information, there are five Other Supplementary Information schedules, as described below:

- The Schedule of Plan Net Position and Schedule of Changes in Plan Net Position – Defined Benefit Pension Plan, pages 87 and 89, display the components of the defined benefit pension plan.
- The Schedule of Administrative Expenses and Schedule of Payments to Consultants and Contractors on pages 91 and 92 show the costs of managing the System.
- The Summary of Investment Fees, Commissions, and Expenses begins on page 93 and provides the detail of investment-related expenses included in the Investment Expense line item reported in the Statement of Changes in Fiduciary Net Position.

FIDUCIARY FUNDS

- PERS' assets exceeded its liabilities at the close of fiscal year 2022, with \$99,535.0 million restricted for pension, IAP, OPEB, and deferred compensation benefits.
- Fiduciary net position decreased by \$1,240.4 million, or 1.2%, primarily because investment earnings and employer contributions were less than total benefits and administrative expenses paid.
- PERS' funding objective is to meet long-term benefit obligations. As of December 31, 2021, the date of the latest actuarial funding valuation, the funded ratio of the defined benefit pension plan, including side accounts, was 86.4%. In general, this means that for every \$1 of future pension benefits due, PERS has approximately \$0.86 available for payment.
- Revenues (additions to fiduciary net position), which include member and employer contributions of \$5,026.8 million and investment activities totaling \$214.2 million, were down 79.3% for fiscal year 2022, from \$25,444.3 million in fiscal year 2021. This decrease was attributable to a \$22,160.8 million decrease in investment earnings.
- Expenses (deductions from fiduciary net position) increased 7.0% to \$6,497.8 million during the fiscal year from \$6,074.5 million in fiscal year 2021, primarily because of a similar increase in benefit payments.

FIDUCIARY NET POSITION

The condensed comparative summaries of Fiduciary Net Position on page 24 demonstrate that the pension trust and other employee benefit trust funds are primarily focused on investments and net position (reserves).

- The net position of the Defined Benefit Pension Plan decreased approximately \$561.8 million, or 0.7%, during the fiscal year ended June 30, 2022. This was primarily because the combination of the decrease in the fair value of investments and employer contributions was roughly equal to the total of benefits paid and administrative expenses.
- The net position of the OPSRP IAP decreased approximately \$345.3 million, or 2.7%, during the fiscal year ended June 30, 2022. This decrease was primarily caused by the decrease in the fair value of investments.
- The net position of the Deferred Compensation Plan decreased approximately \$316.1 million, or 11.2%, during the fiscal year ended June 30, 2022. This was because a \$319.9 million, or 11.4%, decrease in the fair value of investments.
- The net position of the RHIA decreased approximately \$22.2 million, or 3.0%, during the fiscal year ended June 30, 2022. This was primarily caused by a \$18.6 million, or 2.5%, decrease in the fair value of investments.
- The net position of the RHIPA increased approximately \$4.9 million, or 6.3%, during the fiscal year ended June 30, 2022. This was primarily because of the increase in the fair value of investments of 8.6%.

CHANGES IN FIDUCIARY NET POSITION

Revenues - Additions to Fiduciary Net Position

Additions to Fiduciary net position that are needed to finance retirement benefits are accumulated through the collection of employer and member contributions and through investment income.

- Defined Benefit Pension Plan:
 - Total additions for fiscal year 2022 decreased \$16,340.1 million, or 76.7%, compared to fiscal year 2021. This decrease was chiefly attributed to the \$18,208.6 million, or 95.8%, decrease in Net Investment and Other Income.
 - Employer contributions increased \$1,868.7 million in fiscal year 2022 compared to fiscal year 2021, partially because of \$1,888.6 million in new lump-sum deposits to side accounts.
 - Member contributions, consisting primarily of redirected IAP contributions deposited to the Employee Pension Stability Account (EPSA) funds decreased \$0.2 million, or 0.1%.
- The Individual Account Program: Total additions decreased \$2,727.8 million, or 86.9%, because of the \$2,779.5 million, or 108.5%, decrease in Net Investment and Other Income.
- Deferred Compensation Plan: The Oregon Savings Growth Plan had a \$935.2 million, or 119.6%, decrease in total additions. Like the other plans, this decrease was due to the \$978.9 million, or 155.4%, decrease in Net Investment and Other Income compared to fiscal year 2021. Member contributions increased \$43.6 million, or 28.7%, over fiscal year 2021.
- Retirement Health Insurance Account: Total additions decreased \$164.8 million, or 94.3%, primarily because of a decrease of \$164.3 million, or 95.6%, in Net Investment and Other Income.
- Retiree Health Insurance Premium Account: Total additions decreased \$19.0 million, or 67.8%, over the fiscal year 2021. This decrease was primarily because of the \$15.5 million, or 95.3%, decrease in Net Investment and Other Income.

TABLE 1
FIDUCIARY NET POSITION, PENSION AND OTHER EMPLOYEE BENEFITS
(in thousands) As of June 30

	Defined Benefit Pension Plan		Individual Account Program		Deferred Compensation Plan	
	2022	2021	2022	2021	2022	2021
Cash and Receivables	\$ 7,436,005	\$ 4,641,088	\$ 1,171,302	\$ 900,682	\$ 24,212	\$ 18,691
Investments at Fair Value	80,873,065	81,586,458	11,770,343	12,093,590	2,486,727	2,806,582
Securities Lending						
Collateral	408,623	568,547	46,016	64,868	2	-
Other	30,994	31,693	1,091	1,013	-	-
Total Assets	<u>88,748,687</u>	<u>86,827,786</u>	<u>12,988,752</u>	<u>13,060,153</u>	<u>2,510,941</u>	<u>2,825,273</u>
Investment Purchases	4,528,482	1,888,776	450,715	163,331	5,071	3,245
Securities Lending						
Payable	408,711	568,592	46,026	64,873	2	-
Other Payables, Leases						
Payable and Def. Inflows	41,941	39,102	46,326	40,941	179	274
Total Liabilities and Deferred Inflows	<u>4,979,134</u>	<u>2,496,470</u>	<u>543,067</u>	<u>269,145</u>	<u>5,252</u>	<u>3,519</u>
Total Net Position	<u>\$ 83,769,553</u>	<u>\$ 84,331,316</u>	<u>\$ 12,445,685</u>	<u>\$ 12,791,008</u>	<u>\$ 2,505,689</u>	<u>\$ 2,821,754</u>

TABLE 2
FIDUCIARY NET POSITION, OTHER POSTEMPLOYMENT BENEFITS
(in thousands) As of June 30

	Retirement Health Insurance Account		Retiree Health Insurance Premium Account	
	2022	2021	2022	2021
Cash and Receivables	\$ 57,832	\$ 42,967	\$ 7,478	\$ 6,135
Investments at Fair Value	713,945	732,522	80,059	73,713
Securities Lending				
Collateral	3,610	5,134	406	517
Other	75	66	9	7
Total Assets	<u>775,462</u>	<u>780,689</u>	<u>87,952</u>	<u>80,372</u>
Investment Purchases	38,421	15,504	4,023	1,298
Securities Lending				
Payable	3,611	5,134	406	517
Other Payables	2,730	7,145	195	163
Total Liabilities	<u>44,762</u>	<u>27,783</u>	<u>4,624</u>	<u>1,978</u>
Total Net Position	<u>\$ 730,700</u>	<u>\$ 752,906</u>	<u>\$ 83,328</u>	<u>\$ 78,394</u>

Expenses – Deductions From Fiduciary Net Position

Benefit payments, refunds of contributions to members who terminate employment, health insurance premium subsidies, deferred compensation payments, and administrative costs comprise the System's expenses.

- Defined Benefit Pension Plan: Pension benefit and other expenses were \$5,541.8 million in fiscal year 2022, a \$233.6 million, or 4.4%, increase over fiscal year 2021. This was primarily due to the 4.4% net increase in pension benefits paid.
- Individual Account Program: IAP benefit and other expenses increased by \$166.1 million, or 28.1%, during the year from what they were in fiscal year 2021. The increase in IAP benefit payments is primarily due to the significant increase in member account balances after earnings crediting at the end of calendar year 2021.
- Deferred Compensation Plan: Deferred compensation benefits and other expenses increased by \$23.8 million, or 17.1%, from fiscal year 2021, because of an increase in requests for rollovers and distributions.
- Retirement Health Insurance Account: RHIA healthcare premium and other expenses decreased by approximately \$409,000, or 1.3%, from fiscal year 2021. This decrease was attributed to an approximately \$726,000, or 2.3%, decrease in healthcare premium subsidies, which was consistent with the decrease in participants.
- Retiree Health Insurance Premium Account: RHIPA healthcare premium and other expenses increased by 3.3%, from fiscal year 2021, because of increased healthcare costs.
- The tables on page 26 show condensed comparative summaries of the changes in fiduciary net position and reflect the activities of the plans administered by the System.

PROPRIETARY FUND

Standard Retiree Health Insurance Account (SRHIA) uses an enterprise fund to account for the activities of PERS' health insurance program (PHIP), a public entity risk pool.

Net Position

- The net position of the SRHIA as of June 30, 2022, was \$93.5 million, a \$6.3 million, or 6.3%, decrease from fiscal year 2021. This was primarily due to an increase in claims expenses.

TABLE 3
CHANGES IN FIDUCIARY NET POSITION, PENSION AND OTHER EMPLOYEE BENEFITS
(in thousands) For the Fiscal Years Ended June 30

	Defined Benefit Pension Plan		Individual Account Program		Deferred Compensation Plan	
	2022	2021	2022	2021	2022	2021
Additions:						
Employer Contributions	\$ 4,030,159	\$ 2,161,451	\$ -	\$ -	\$ -	\$ -
Member Contributions	160,098	160,309	630,155	578,414	195,637	151,996
Net Investment and						
Other Income	789,785	18,998,416	(218,607)	2,560,936	(348,864)	630,011
Total Additions	4,980,042	21,320,176	411,548	3,139,350	(153,227)	782,007
Deductions:						
Pension Benefits	5,468,215	5,237,138	744,713	577,900	161,003	136,615
Other	73,590	71,019	12,158	12,827	1,835	2,418
Total Deductions	5,541,805	5,308,157	756,871	590,727	162,838	139,033
Net Increase (Decrease)	(561,763)	16,012,019	(345,323)	2,548,623	(316,065)	642,974
Net Position						
Beginning of Year	84,331,316	68,319,297	12,791,009	10,242,386	2,821,754	2,178,780
End of Year	\$ 83,769,553	\$ 84,331,316	\$ 12,445,686	\$ 12,791,009	\$ 2,505,689	\$ 2,821,754

TABLE 4
CHANGES IN FIDUCIARY NET POSITION, OTHER POSTEMPLOYMENT BENEFITS
(in thousands) For the Fiscal Years Ended June 30

	Retirement Health Insurance Account		Retiree Health Insurance Premium Account	
	2022	2021	2022	2021
Additions:				
Employer Contributions	\$ 2,459	\$ 2,963	\$ 8,265	\$ 11,724
Net Investment and				
Other Income	7,547	171,822	765	16,297
Total Additions	10,006	174,785	9,030	28,021
Deductions:				
Healthcare Premium				
Subsidies	30,609	31,335	3,432	3,673
Other	1,604	1,287	666	292
Total Deductions	32,213	32,622	4,098	3,965
Net Increase (Decrease)	(22,207)	142,163	4,932	24,056
Net Position				
Beginning of Year	752,907	610,744	78,396	54,340
End of Year	\$ 730,700	\$ 752,907	\$ 83,328	\$ 78,396

Changes in Net Position

- SRHIA insurance premiums and other revenue for the fiscal year ended June 30, 2022, was \$2.4 million, or 7.6%, lower than fiscal year 2021. This decrease was primarily due to a similar decrease in insurance premiums.
- SRHIA healthcare and other expenses for the fiscal year ended June 30, 2022, increased \$4.9 million, or 16.0%, from fiscal year 2021. This was primarily due to providers reopening following the initial pandemic shutdown.

The tables below and on the next page show the condensed summary of net position and the condensed summary of changes in revenues, expenses, and net position for SRHIA.

TABLE 5
NET POSITION, PROPRIETARY FUND
(in thousands) As of June 30

	Standard Retiree Health Insurance Account	
	2022	2021
Cash and Receivables	\$ 95,984	\$ 102,024
Net OPEB Asset	12	2
Securities Lending Collateral	541	302
Total Assets	96,537	102,328
Deferred Outflows of Resources:		
Pensions	200	184
OPEB	2	3
Total Deferred Outflows of Resources	202	187
Claims Payable	848	830
Other Payables	1,309	970
Securities Lending Payable	541	302
Net Pension Liability	286	549
Other Liabilities	43	40
Total Liabilities	3,027	2,691
Deferred Inflows of Resources:		
Pensions	223	12
OPEB	11	2
Total Deferred Inflows of Resources	234	14
Total Net Position	\$ 93,478	\$ 99,810

TABLE 6
REVENUES, EXPENSES, AND CHANGES IN NET POSITION, PROPRIETARY FUND
(in thousands) For the Fiscal Years Ended June 30

	Standard Retiree Health Insurance Account	
	2022	2021
Revenues:		
Insurance Premiums	\$ 28,296	\$ 30,379
Investment Income	612	895
Total Revenues	<u>28,908</u>	<u>31,274</u>
Expenses:		
Claims	31,035	25,743
Change in Estimated Liabilities	18	200
Administrative Expense	4,187	4,434
Total Expenses	<u>35,240</u>	<u>30,377</u>
Net Increase	(6,332)	897
Net Position		
Beginning of Year	<u>99,810</u>	<u>98,913</u>
End of Year	<u>\$ 93,478</u>	<u>\$ 99,810</u>

NET PENSION LIABILITY

The Employers' Net Pension Liability (NPL) as of June 30, 2022, was \$15,312.0 million, compared to a Net Pension Liability of \$11,966.5 million as of June 30, 2021. The \$3,345.5 million increase in Employers' Net Pension Liability correlates to the \$2,783.8 million increase in Total Pension Liability.

NET OPEB LIABILITY/(ASSET)

The Employers' Net OPEB Asset for RHIA as of June 30, 2022, was \$355.3 million, compared to the Net OPEB Asset of \$343.4 million as of June 30, 2021. The Employer's Net OPEB Asset for RHIPA as of June 30, 2022, was \$34.2 million, compared to the Net OPEB Asset of \$15.5 million as of June 30, 2021.

INVESTMENT ACTIVITIES

During fiscal year 2022, investments decreased 1.4% from the prior fiscal year as markets moved toward more stability. Holdings in asset classes experienced varied investment returns. The Private Equity portfolio decreased 4.4%; while Real Estate and Real Estate Investment Trusts increased 32.8%, and Real Assets Diversifying Strategies combined increased 31.5%. One-year returns on asset classes and comparative benchmarks are presented in the table on page 31.

PLAN MEMBERSHIP

Table 7 reflects the Defined Benefit Pension Plan membership as of the end of the last two fiscal years.

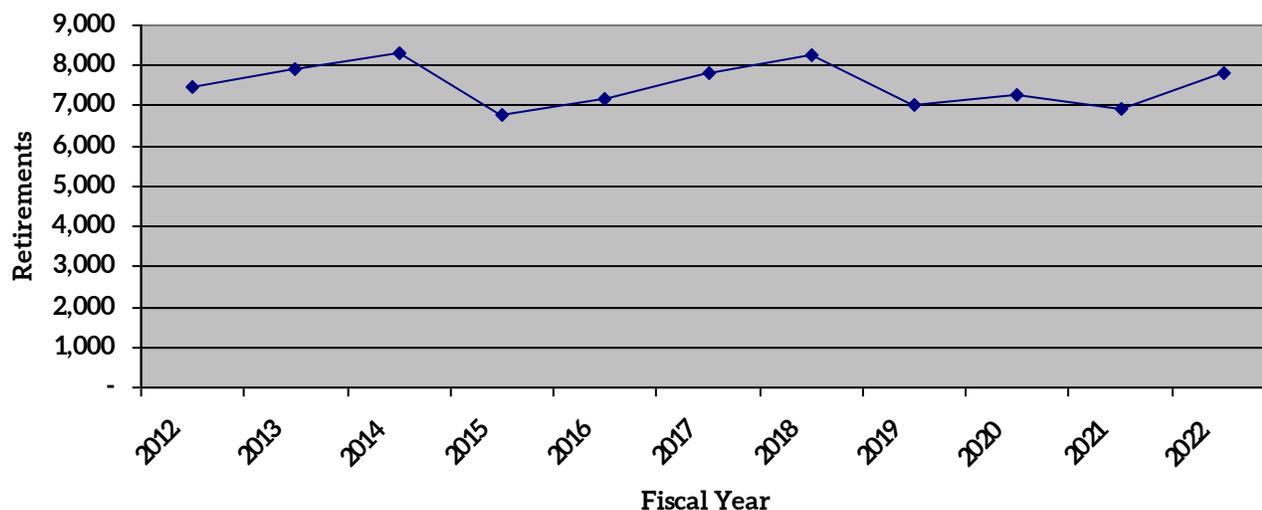
TABLE 7
CHANGES IN PLAN MEMBERSHIP
 As of June 30

	<u>2022</u>	<u>2021</u>	<u>Percentage Change</u>
Active members:			
General	165,299	164,080	0.7 %
Police and Fire	<u>15,641</u>	<u>16,018</u>	(2.4)
Subtotal - Active members	<u>180,940</u>	<u>180,098</u>	0.5
Retirees and Inactive members:			
Receiving Benefits:			
General	146,712	143,495	2.2
Police and Fire	13,614	13,005	4.7
Not Receiving Benefits:			
General	49,320	46,167	6.8
Police and Fire	<u>2,494</u>	<u>2,217</u>	12.5
Subtotal - Inactive members	<u>212,140</u>	<u>204,884</u>	3.5
Total members	<u><u>393,080</u></u>	<u><u>384,982</u></u>	2.1 %

RETIREMENTS FROM SERVICE

Retirements from service increased 7.1% in fiscal year 2022. Service retirements in fiscal year 2022 were 7,811 compared to 6,917 in fiscal year 2021.

TABLE 8
RETIREMENTS FROM SERVICE
 By Fiscal Year



CURRENTLY KNOWN FACTS, CONDITIONS, OR DECISIONS

The following represents currently known facts, conditions, or decisions that are expected to have a significant effect on the System's financial position or results of operations.

Since June 30, 2022, 18 school districts and community college employers participated in the issuance of pension obligation bonds, resulting in lump-sum deposits to new side accounts with PERS totaling \$93.2 million.

CONTACTING THE SYSTEM'S FINANCIAL MANAGEMENT

This financial report is designed to provide plan participants, employers, citizens, taxpayers, and others with a general overview of the System's finances and to demonstrate the Board's oversight of the System. If you have questions about this report or need additional financial information, please contact the Financial Services Division Administrator at P.O. Box 23700, Tigard, Oregon 97281-3700, or send an email to us at pers.gasb.questions@pers.oregon.gov.

Table 9
Investment Results*
Periods Ended June 30, 2022

	2022	2021
Total Portfolio, Excluding Variable Account Policy Benchmark ¹	6.32 % (0.66)	25.54 % 26.89
Variable Account	(16.21)	41.29
Benchmark: MSCI All Country World Investable Market Index Net	(16.52)	40.94
Domestic Stocks	(12.92)	46.86
Benchmark: Russell 3000 Index	(13.87)	44.16
International Stocks	(16.47)	43.12
Benchmark: MSCI All Country World ex-US Investable Market Index Net	(19.86)	37.18
Fixed Income Segment	(9.05)	1.27
Benchmark: Oregon Custom Index ²	(10.12)	0.67
Risk Parity ³	(12.95)	21.51
Benchmark: S&P Risk Parity - 12% Target Volatility	(6.67)	31.51
Real Estate	29.61	8.18
Benchmark: Oregon Custom Real Estate Benchmark ⁴	27.26	1.47
Private Equity	24.23	44.12
Benchmark: Russell 3000 Index + 300 bps ⁵	15.25	67.21
Alternatives Portfolio ⁶	n/a	11.48
Benchmark: Consumer Price Index + 400 bps	n/a	9.59
Real Assets ⁶	23.15	n/a
Benchmark: Consumer Price Index + 400 bps	13.39	n/a
Diversifying Strategies ⁶	17.09	n/a
Benchmark: HFRI FOF Conservative Index	0.13	n/a
Opportunity Portfolio	10.19	31.52
Benchmark: Consumer Price Index + 500 bps	14.47	9.59

The rates of return reported in the Investment Section are based on a time-weighted rate of return methodology based upon market values, unless disclosed otherwise in the footnotes to the associated table.

* Investment Results are based upon OIC asset classes as determined by each manager's primary investment type, not the financial statement classification of individual holdings.

¹ From July 1, 2020 to September 30, 2021 the policy benchmark was 19% Russell 3000+300 Bps quarter lag, 20% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 33.5% MSCI ACWI IMI Net, 12.50% CPI+4%, and 2.50% S&P Risk Parity - 12% Target Volatility. From October 1, 2021 to Present the policy benchmark is 20% Russell 3000+300 Bps quarter lag, 20% BBG U.S. Aggregate, 12.50% NCREIF ODCE (Custom), 30% MSCI ACWI IMI Net, 7.50% CPI+4%, 7.50% HFRI FOF Conservative Index and 2.50% S&P Risk Parity - 12% Target Volatility.

² From March 1, 2016 to September 30, 2021, index was 46% BBG Aggregate Bond, 37% BBG Treasury, 13% S&P LSTA and 4% BofA ML High Yield Master II. From October 1, 2021 to Present, index is 100% Bloomberg U.S. Aggregate.

³ Inception date is May 1, 2020.

⁴ Starting July 1, 2017, methodology for monthly return is calculated by geometrically linking prior months returns, and then deriving the monthly returns by calculating the geometric average. Returns are not actual monthly, but rather equivalent for all intra-quarter months, in order to match the actual quarterly return.

⁵ From July 1, 2017, the monthly return is calculated as the geometrically linked monthly-portion of the quarterly return. Returns are not actual monthly, but rather equivalent for all intra-quarter months, in order to match the actual quarterly return.

⁶ Beginning October 1, 2021, the Alternatives Portfolio has been split up into new portfolios: Real Assets and Diversifying Strategies.

Basic Financial Statements

Basic Financial Statements

Statement of Fiduciary Net Position
Pension and Other Postemployment Plans
As of June 30, 2022, with Comparative Totals as of June 30, 2021

	Defined Benefit OPEB Plans			
	Defined Benefit Pension Plan	Oregon Public Service Retirement Plan Individual Account Program	Retirement Health Insurance Account	Retiree Health Insurance Premium Account
Assets:				
Cash and Cash Equivalents	\$ 4,022,204,289	\$ 806,167,602	\$ 29,305,235	\$ 3,910,652
Receivables:				
Employer	45,254,184	-	1,691,076	541,186
Plan Member	-	27,901,002	-	-
Interest and Dividends	138,121,053	15,359,773	1,223,787	137,232
Member Loans	-	-	-	-
Investment Sales and Other Receivables	2,901,277,479	321,861,175	25,611,894	2,888,878
Leases	242,030	-	-	-
Transition Liability	305,741,323	-	-	-
Total Receivables	<u>3,390,636,069</u>	<u>365,121,950</u>	<u>28,526,757</u>	<u>3,567,296</u>
Due from Other Funds	23,164,923	12,260	38	161
Investments:				
Debt Securities	15,547,742,373	3,038,350,041	137,756,907	15,447,609
Public Equity	18,041,656,731	3,473,805,619	157,242,696	17,632,681
Real Estate and Real Estate Investment Trusts	12,028,715,637	1,337,655,141	106,577,445	11,951,246
Private Equity	21,932,889,468	2,439,050,289	194,330,916	21,791,633
Real Assets	6,684,489,024	743,349,613	59,226,254	6,641,438
Diversifying Strategies	4,631,885,567	515,089,535	41,039,671	4,602,054
Opportunity Portfolio	2,005,685,976	223,042,612	17,770,882	1,992,769
Total Investments	<u>80,873,064,776</u>	<u>11,770,342,850</u>	<u>713,944,771</u>	<u>80,059,430</u>
Securities Lending Collateral	408,622,830	46,016,417	3,609,961	405,835
Prepaid Expenses	10,119,791	935,788	74,559	8,361
Capital Assets at Cost, Net	20,874,179	155,626	-	-
Total Assets	<u>88,748,686,857</u>	<u>12,988,752,493</u>	<u>775,461,321</u>	<u>87,951,735</u>
Liabilities:				
Investment Purchases and Accrued Expenses	4,528,482,088	450,714,897	38,420,657	4,023,250
Deposits and Other Liabilities	32,981,250	31,828,822	2,657,717	115,777
Due to Other Funds	8,230,412	14,496,912	72,520	78,980
Leases Payable	488,211	-	-	-
Securities Lending Collateral Due Borrowers	408,710,702	46,026,189	3,610,740	405,922
Total Liabilities	<u>4,978,892,663</u>	<u>543,066,820</u>	<u>44,761,634</u>	<u>4,623,929</u>
Deferred Inflows of Resources:				
Leases, net of Amortization	241,340	-	-	-
Net Position:				
Restricted for:				
Pension	83,769,552,854	-	-	-
Individual Account Program	-	12,445,685,673	-	-
Other Postemployment Benefits	-	-	730,699,687	83,327,806
Deferred Compensation Plan	-	-	-	-
Total Net Position	<u>\$ 83,769,552,854</u>	<u>\$ 12,445,685,673</u>	<u>\$ 730,699,687</u>	<u>\$ 83,327,806</u>

The accompanying notes are an integral part of the financial statements.

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Deferred Compensation Plan		2022	2021
\$	10,275,495	\$ 4,871,863,273	\$ 4,036,777,432
	-	47,486,446	36,959,288
	-	27,901,002	21,427,477
	581,524	155,423,369	132,640,598
	13,354,659	13,354,659	13,051,681
	-	3,251,639,426	996,697,692
	-	242,030	-
	-	305,741,323	358,150,836
	<u>13,936,183</u>	<u>3,801,788,255</u>	<u>1,558,927,572</u>
	-	23,177,382	13,859,404
	462,003,363	19,201,300,293	16,577,911,142
	2,024,723,424	23,715,061,151	33,064,101,068
	-	13,484,899,469	10,151,288,539
	-	24,588,062,306	25,725,638,086
	-	7,493,706,329	6,165,719,130
	-	5,192,616,827	3,482,234,605
	-	2,248,492,239	2,125,974,636
	<u>2,486,726,787</u>	<u>95,924,138,614</u>	<u>97,292,867,206</u>
	1,955	458,656,998	639,065,785
	-	11,138,499	10,995,390
	-	21,029,805	21,783,313
	<u>2,510,940,420</u>	<u>105,111,792,826</u>	<u>103,574,276,102</u>
	5,070,688	5,026,711,580	2,072,151,814
	-	67,583,566	73,864,243
	179,479	23,058,303	13,760,231
	-	488,211	-
	1,955	458,755,508	639,116,840
	<u>5,252,122</u>	<u>5,576,597,168</u>	<u>2,798,893,128</u>
	--	241,340	-
	-	83,769,552,854	84,331,316,437
	-	12,445,685,673	12,791,008,510
	-	814,027,493	831,303,653
	2,505,688,298	2,505,688,298	2,821,753,374
\$	<u>2,505,688,298</u>	<u>\$ 99,534,954,318</u>	<u>\$ 100,775,381,974</u>

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Basic Financial Statements

Statement of Changes in Fiduciary Net Position Pension and Other Postemployment Plans

For the Fiscal Year Ended June 30, 2022, with Comparative Totals for the Fiscal Year Ended June 30, 2021

	Defined Benefit OPEB Plans			
	Defined Benefit Pension Plan	Oregon Public Service Retirement Plan Individual Account Program	Retirement Health Insurance Account	Retiree Health Insurance Premium Account
Additions:				
Contributions:				
Employer	\$ 4,030,158,539	\$ -	\$ 2,458,525	\$ 8,264,936
Plan Member	160,097,904	630,155,422	-	-
Total Contributions	<u>4,190,256,443</u>	<u>630,155,422</u>	<u>2,458,525</u>	<u>8,264,936</u>
Investment Income:				
Net Appreciation/(Decrease) in Fair Value of Investments	103,479,143	(299,544,894)	1,492,572	113,806
Interest, Dividends and Other Investment Income	1,951,134,285	221,033,254	17,378,762	1,867,508
Total Investment Income	<u>2,054,613,428</u>	<u>(78,511,640)</u>	<u>18,871,334</u>	<u>1,981,314</u>
Less Investment Expense	(1,275,161,216)	(148,194,472)	(11,359,555)	(1,220,298)
Net Investment Income	<u>779,452,212</u>	<u>(226,706,112)</u>	<u>7,511,779</u>	<u>761,016</u>
Securities Lending Income:				
Securities Lending Income	6,037,093	677,520	53,877	5,746
Less Securities Lending Expense	(2,131,752)	(239,437)	(19,016)	(2,031)
Net Securities Lending Income	<u>3,905,341</u>	<u>438,083</u>	<u>34,861</u>	<u>3,715</u>
Other Income				
	6,427,103	7,660,886	-	-
Total Additions	<u>4,980,041,099</u>	<u>411,548,279</u>	<u>10,005,165</u>	<u>9,029,667</u>
Deductions:				
Benefits	5,462,482,777	744,712,857	-	-
Death Benefits	5,732,332	-	-	-
Refunds of Contributions	14,893,205	-	-	-
Administrative Expense	58,696,368	12,158,259	1,604,127	665,569
Healthcare Premium Subsidies	-	-	30,609,060	3,432,236
Total Deductions	<u>5,541,804,682</u>	<u>756,871,116</u>	<u>32,213,187</u>	<u>4,097,805</u>
Net Increase/(Decrease)	<u>(561,763,583)</u>	<u>(345,322,837)</u>	<u>(22,208,022)</u>	<u>4,931,862</u>
Net Position				
Beginning of Year	84,331,316,437	12,791,008,510	\$ 752,907,709	\$ 78,395,944
End of Year	<u>\$ 83,769,552,854</u>	<u>\$ 12,445,685,673</u>	<u>\$ 730,699,687</u>	<u>\$ 83,327,806</u>

The accompanying notes are an integral part of the financial statements.

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Deferred Compensation Plan	2022	2021
\$ -	\$ 4,040,882,000	\$ 2,176,138,628
195,637,308	985,890,634	890,719,246
<u>195,637,308</u>	<u>5,026,772,634</u>	<u>3,066,857,874</u>
(353,055,948)	(547,515,321)	21,612,104,148
8,369,920	2,199,783,729	1,757,373,842
<u>(344,686,028)</u>	<u>1,652,268,408</u>	<u>23,369,477,990</u>
(6,475,339)	(1,442,410,880)	(999,681,203)
<u>(351,161,367)</u>	<u>209,857,528</u>	<u>22,369,796,787</u>
1	6,774,237	7,106,443
(1)	(2,392,237)	(1,831,050)
<u>-</u>	<u>4,382,000</u>	<u>5,275,393</u>
2,296,921	16,384,910	2,410,306
<u>(153,227,138)</u>	<u>5,257,397,072</u>	<u>25,444,340,360</u>
161,003,068	6,368,198,702	5,946,729,957
-	5,732,332	4,922,561
-	14,893,205	11,934,465
1,834,870	74,959,193	75,910,699
-	34,041,296	35,007,770
<u>162,837,938</u>	<u>6,497,824,728</u>	<u>6,074,505,452</u>
(316,065,076)	(1,240,427,656)	19,369,834,908
\$ 2,821,753,374	100,775,381,974	81,405,547,066
<u>\$ 2,505,688,298</u>	<u>\$ 99,534,954,318</u>	<u>\$ 100,775,381,974</u>

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Basic Financial Statements

Statement of Net Position

Proprietary Fund

As of June 30, 2022, with Comparative Totals as of June 30, 2021

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2022	2021
Assets:		
Current Assets		
Cash and Cash Equivalents	\$ 95,984,305	\$ 102,023,985
Securities Lending Collateral	540,718	302,207
Total Current Assets	96,525,023	102,326,192
Noncurrent Assets		
Net OPEB Asset	12,201	1,802
Total Noncurrent Assets	12,201	1,802
Total Assets	96,537,224	102,327,994
Deferred Outflows of Resources		
Pension	199,506	184,031
OPEB	2,087	2,387
Total Deferred Outflows of Resources	201,593	186,418
Liabilities:		
Current Liabilities		
Accrued Expenses	1,153,819	840,577
Compensated Absences	34,089	26,093
Due to Other Funds	119,079	99,173
Estimated Insurance Claims Due	848,000	830,000
Pension Obligation Bonds	2,283	2,153
Securities Lending Collateral Due Borrowers	540,718	302,207
Total Current Liabilities	2,697,988	2,100,203
Noncurrent Liabilities		
Compensated Absences	19,175	14,050
Pension Obligation Bonds	12,426	15,160
Other Liabilities	11,320	10,482
Net Pension Liability	286,029	549,185
Total Noncurrent Liabilities	328,950	588,877
Total Liabilities	3,026,938	2,689,080
Deferred Inflows of Resources		
Pension	223,312	12,477
OPEB	11,047	2,417
Total Deferred Inflows of Resources	234,359	14,894
Net Position:		
Restricted for:		
OPEB	3,241	1,772
Unrestricted	93,474,279	99,808,666
Total Net Position	\$ 93,477,520	\$ 99,810,438

The accompanying notes are an integral part of the financial statements.

Statement of Revenues, Expenses, and Changes in Net Position
Proprietary Fund

For the Fiscal Year Ended June 30, 2022, with Comparative Totals for the Fiscal Year Ended June 30, 2021

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2022	2021
Operating Revenues:		
Insurance Premium Revenue	\$ 28,295,570	\$ 30,379,505
Reinsurance Reimbursements	-	6,102
Total Operating Revenues	<u>28,295,570</u>	<u>30,385,607</u>
Operating Expenses:		
Claims Expense	31,035,409	25,743,066
Increase in Estimated Liabilities	18,000	200,000
Administrative Expense	4,187,165	4,433,395
Total Operating Expenses	<u>35,240,574</u>	<u>30,376,461</u>
Operating Income/(Loss)	(6,945,004)	9,146
Non-Operating Revenues:		
Interest, Dividends, and Other Investment Income	612,086	887,863
Securities Lending Income	1,179	597
Less Securities Lending Expense	(1,179)	(597)
Net Securities Lending Income	-	-
Total Non-Operating Revenues	<u>612,086</u>	<u>887,863</u>
Change in Net Position	(6,332,918)	897,009
Total Net Position		
Beginning of Year	<u>99,810,438</u>	<u>98,913,429</u>
End of Year	<u>\$ 93,477,520</u>	<u>\$ 99,810,438</u>

The accompanying notes are an integral part of the financial statements.

Basic Financial Statements

Statement of Cash Flows

Proprietary Fund

For the Fiscal Year Ended June 30, 2022, with Comparative Totals for the Fiscal Year Ended June 30, 2021

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2022	2021
Cash Flows from Operating Activities:		
Insurance Premiums and Reinsurance Reimbursements	\$ 28,295,570	\$ 31,064,247
Claims Paid	(31,035,409)	(25,743,066)
Other Payments	(3,911,927)	(4,822,040)
Net Cash Provided by/(Used for) Operating Activities	(6,651,766)	499,141
Cash Flows from Investing Activities:		
Interest and Dividends Received	612,086	887,863
Net Increase/(Decrease) in Cash and Cash Equivalents	(6,039,680)	1,387,004
Cash and Cash Equivalents Beginning of Year	102,023,985	100,636,981
Cash and Cash Equivalents End of Year	\$ 95,984,305	\$ 102,023,985
Reconciliation of Operating Income/(Loss) to Net Cash Provided by/(used for) Operating Activities		
Operating Income/(Loss)	\$ (6,945,004)	\$ 9,146
Adjustments to reconcile operating income/(loss) to net cash provided by/(used for) operating activities:		
Changes in assets, deferred outflows of resources, liabilities, and deferred inflows of resources:		
Reinsurance Reimbursements and Rebate Receivables	-	678,640
Net OPEB Asset	(10,399)	4,362
Deferred Outflows of Resources - Pension	(15,475)	(10,316)
Deferred Outflows of Resources - OPEB	300	(998)
Accrued Expenses	313,242	(394,045)
Compensated Absences	13,121	10,717
Due to Other Funds	19,906	19,614
Estimated Insurance Claims Due	18,000	200,000
Pension Obligation Bonds	(2,604)	(2,336)
Other Liabilities	838	(3,511)
Net Pension Liability	(263,156)	2,250
Deferred Inflows of Resources - Pension	210,835	(13,598)
Deferred Inflows of Resources - OPEB	8,630	(784)
Net Cash Provided by/(used for) Operating Activities	\$ (6,651,766)	\$ 499,141

The accompanying notes are an integral part of the financial statements.

Note 1 - Summary of Significant Accounting Policies

A. Reporting Entity

The accompanying financial statements include all activities and funds administered by the Oregon Public Employees Retirement System (PERS or the System). The Defined Benefit and OPEB plans are fiduciary component units of the State of Oregon for financial reporting purposes. PERS financial statements are included in fiduciary and proprietary funds in the *State of Oregon's Annual Comprehensive Financial Report (ACFR)*.

B. Basis of Presentation

The accompanying financial statements are prepared on the basis of a fiscal year ended June 30, 2022, in accordance with generally accepted accounting principles in the United States of America as set forth in Governmental Accounting Standards Board (GASB) pronouncements that apply to governmental accounting for fiduciary funds and enterprise funds. Fiduciary funds are used to account for assets held by a governmental unit in a trustee capacity (trust funds). Proprietary funds may be used to report any activity for which a fee is charged to external users for goods or services.

PERS' pension, other postemployment benefits (OPEB), and deferred compensation activities are accounted for in four pension, other employee benefit, and other postemployment benefit trust funds:

- Defined Benefit Pension Plan, a cost-sharing, multiple-employer plan, which includes the Variable Annuity Account.
- Oregon Public Service Retirement Plan - Individual Account Program, an individual account-based program under the PERS tax-qualified governmental plan.
- Retirement Health Insurance Account, a cost-sharing, multiple-employer plan.
- Retiree Health Insurance Premium Account, a single-employer plan.
- Deferred Compensation Plan (Oregon Savings Growth Plan)—other employee benefit trust fund.

PERS' public entity risk pool activity is accounted for in a single proprietary enterprise fund:

- Standard Retiree Health Insurance Account.

C. Basis of Accounting

The accrual basis of accounting is used for all funds. Revenues are recognized when earned. Contributions are recognized when due, pursuant to legal (or statutory) requirements. Benefits and withdrawals are recognized when they are currently due and payable in accordance with the terms of the plans.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues are insurance premiums and operating expenses include claims and administrative expenses. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses. Deferred outflows of resources related to pension and OPEB resulting from contributions made subsequent to the measurement date will be recognized as a reduction of the net pension liability and net OPEB liability or as an increase in the net OPEB asset in the following year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pension and OPEB will be recognized in pension and OPEB expenses for approximately each of the next four years.

D. Investments

Oregon Revised Statute (ORS) 293.706 established the Oregon Investment Council (OIC), which consists of five voting members. Four members of the council, who are qualified by training and experience in the field of investment or finance, are appointed by the governor subject to state senate confirmation. The State Treasurer serves as the council's remaining voting member. In addition, the Director of PERS serves as a non-voting OIC member.

ORS 293.701 defines the investment funds over which OIC has responsibility. Included are the Oregon Public Employees Retirement Fund (OPERF), which is composed of the Defined Benefit Pension Plan, the Individual Account Program, the Other Postemployment Benefit plans, and the Deferred Compensation Fund. OIC establishes policies for the investment and reinvestment of moneys in the investment funds as well as the acquisition, retention, management, and disposition of investments in the investment funds. OIC is also responsible for providing an examination of the effectiveness of the investment program.

OIC ensures moneys in the investment funds are invested and reinvested to achieve the investment objective of making the moneys as productive as possible. Furthermore, the investments of those funds are managed as a prudent investor would do under the prevailing circumstances and in light of the purposes, terms, distribution requirements, and laws governing each investment fund. This standard requires the exercise of reasonable care, skill, and caution and is applied to investments, not in isolation, but in the context of each fund's portfolio as part of an overall investment strategy. The strategy should incorporate risk and return objectives reasonably suitable to the particular investment fund.

When implementing investment decisions, OIC has a duty to diversify the investments of the investment funds unless, under the circumstances, it is not prudent to do so. In addition, OIC must act with prudence when selecting agents and delegating authority.

Investments are recognized at fair value, that is the amount that could be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Investments that do not have a readily determinable fair value are valued using the net asset value (NAV) per share. Such values generally represent PERS' ownership interest in partnership capital. Investments are reported on the trade date.

The fair value of publicly traded debt and equity securities in active markets is determined by the custodian's pricing agent using nationally recognized pricing services. The custodian's pricing agent values equity securities traded on a national or international exchange at the last reported sales price and generally values debt securities by using evaluated bid prices. For securities that do not have an active market, such as private placements or commingled investment vehicles, a market price is calculated by either the custodian's pricing agent or the investment manager. For example, a similar benchmark security may be used to derive the fair value. The benchmark will typically have a coupon rate and maturity date comparable to the debt security being valued, and its market risk will be similar, considering current market conditions. The fair value of real estate investment trust (REIT) securities is determined by the custodian's pricing agent using recognized pricing services.

Investments in real estate, other than publicly traded REITs, for which observable market prices in active markets do not exist, are reported at fair value as of June 30, 2022, as determined by management based on valuation information provided in good faith by the general partner. Direct investments in real estate are appraised every two to three years, and between appraisals, investment managers adjust values to reflect current and projected operating performance and financial transactions. In the absence of observable market prices, general partners determine the fair value of real estate partnerships using valuation methods considered most appropriate. A variety of factors are considered, including the nature of the investment, local market conditions, trading values on public exchanges for comparable investments, current and projected operating performance, and financing transactions subsequent to the acquisition of the investment.

Investments in private equities are recorded at fair value as of June 30, 2022, as determined by management based on valuation information provided by the general partner. Investments in private equities representing publicly traded

securities are stated at quoted market price. When observable market inputs are not available, valuation models are applied. The general partner determines fair value based on the best information available and by reference to information including, but not limited to, the following: projected sales, net earnings, earnings before interest, taxes, depreciation and amortization, balance sheets, public and private transactions, valuations for publicly traded comparable companies, and/or other measures, and consideration of any other pertinent information including the types of securities held and the general partner's own assumptions regarding the investment. The methods used to determine the fair value of these investments typically include: (1) the market approach (whereby fair value is derived by reference to observable valuation measures for comparable companies or assets) and (2) the income approach (e.g., the discounted cash flow method).

Investments in the opportunity, real assets and diversifying strategies portfolios are recorded at fair value as of June 30, 2022, by the respective general partner or account manager. Investments in the opportunity and alternatives portfolios representing publicly traded securities are stated at quoted market price. Where observable market inputs are not available, valuation models are applied. The general partner or account manager determines fair value based on the best information available and by reference to information including, but not limited to, the following: projected sales, net earnings, earnings before interest, taxes, depreciation and amortization, balance sheets, public and private transactions, valuations for publicly traded comparable companies, and/or other measures, and consideration of any other pertinent information including the types of securities held and the general partner's own assumptions regarding the investment. The methods used to determine the fair value of these investments typically include: (1) the market approach (whereby fair value is derived by reference to observable valuation measures for comparable companies or assets) and (2) the income approach (e.g., the discounted cash flow method).

Due to the inherent uncertainty and the degree of judgment involved in determining real estate, private equity, opportunity, real assets and diversifying strategies portfolios investment valuations, the fair values reflected in the accompanying financial statements may differ significantly from values that would have been used had a readily determinable fair value for the investments existed, and the difference could be material. In addition, these investments are generally considered to be illiquid long-term investments, and the recorded fair values may materially differ from the amounts that eventually may be realized from the sale or other disposition of these investments.

OIC has approved the following asset classes for the OPERF: Short-Term Investments, Fixed Income, Real Estate, Public and Private Equities, Real Assets, and Diversifying Strategies. In addition, OPERF invests in the Opportunity Portfolio, which may be populated with investment approaches across a wide range of investment opportunities with no limitation as to asset classes or strategies. OIC must approve, in advance, the purchase of investments in a new asset class not described above.

Table 1 below displays the OIC-approved asset allocation policy. See the Long-Term Expected Rate of Return Table 31 on page 74.

TABLE 1

Asset Class	Target Allocation
Cash	0.0%
Debt Securities	20.0%
Public Equity	30.0%
Private Equity	20.0%
Real Estate	12.5%
Real Assets	7.5%
Diversifying Strategies	7.5%
Risk Parity*	2.5%
Total	<u>100.0%</u>

* Risk Parity asset class/strategy included within Diversifying Strategies on the Statement of Fiduciary Net Position

Leases

For GASB 87 reporting, lease expenses are immaterial to the pension trust funds. Certain lease assets meet the capitalization threshold set by the State, but are still considered immaterial to the pension trust fund. Leases meeting that threshold of total lease payments of \$5,000 for lessors and \$250,000 for lessees have been disclosed in Note 5, Capital Assets, including information regarding Lease Obligations. PERS' leases are included in the financial reporting of the State of Oregon.

F. Earnings Crediting

By law, earnings are credited to member accounts on a calendar-year basis. Members in Tier One are currently guaranteed to receive at least the assumed earnings rate used in the most recent actuarial valuation. Variable Annuity Account participants, IAP members, and Tier Two members are credited actual earnings or losses, less deductions allowed by law.

G. Administrative Costs

PERS' administrative expenses are funded from investment earnings and administrative fees

collected from employers and members and are allocated to all plans and programs administered by the System. If investment earnings and fees are insufficient for such purpose, the remaining expenses are paid from employer contributions.

H. Use of Estimates in the Preparation of Financial Statements

The preparation of the System's financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain financial statement amounts and disclosures. Actual results could differ from those estimates.

I. Comparative Totals

The basic financial statements include certain prior year summarized comparative information in total, but not at the level of detail required for a presentation in conformity with the accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements as of and for the fiscal year ended June 30, 2021, from which the summarized information was derived.

J. Effect of New Governmental Accounting Standards Board (GASB) Pronouncement GASB Statement No. 87 and Statement No. 97

In June 2017, GASB issued Statement No. 87, *Leases*, to improve accounting and financial reporting of leases by governments. The objective of this Statement is to better meet the informational needs of financial statement users by improving accounting and financial reporting for leases by governments. In June 2020, GASB issued Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*, to enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans. PERS has implemented these standards for the fiscal year ended June 30, 2022 and all references have been updated accordingly. Lease receivables and deferred inflows are considered immaterial to the defined benefit plan.

K. Reclassifications

Certain reclassifications have been made to the comparative totals as of June 30, 2021 to conform to the presentation as of June 30, 2022.

Note 2 - Description of Plan

A. Organization

PERS administers a cost-sharing, multiple-employer defined benefit pension plan for units of state government, political subdivisions, community

Notes to the Financial Statements

colleges, and school districts. The Plan contains multiple actuarial pools. Plan assets may be used to pay the benefits of the employees of any employer that provides pensions through the Plan. Participation by state government units, school districts, and community colleges is mandatory. Participation by most political subdivisions is optional but irrevocable if elected. As of June 30, 2022, there were 898 participating employers.

PERS is administered in accordance with Oregon Revised Statutes (ORS) Chapter 238, Chapter 238A, and Internal Revenue Code Section 401(a). The Oregon Legislature has delegated authority to the Public Employees Retirement Board (Board) to

administer and manage the System. All members of the Board are appointed by the governor and confirmed by the senate. The Governor designates the chairperson. One member must be a public employer manager or a local elected official, one member must be a union-represented public employee or retiree, and three members must have experience in business management, pension management, or investing.

B. Plan Membership

Employer, retiree, active and inactive member data as of June 30, 2022, is shown in Table 2.

The 1995 Legislature enacted Chapter 654, Section 3, Oregon Laws 1995, which has been

TABLE 2

Plan Membership as of June 30, 2022	Employers	Defined Benefit Plan				Postemployment Healthcare	
		Tier One	Tier Two	OPSRP	Total	RHIA	RHIPA
Employers							
State Agencies	108						
Political Subdivisions	479						
Community Colleges	17						
School Districts	294						
Total Employers	898						
Inactive Members - General Service							
Retirees and Beneficiaries Currently Receiving Benefits		115,559	18,615	9,573	143,747	39,377	506
Alternate Payees Currently Receiving Benefits		2,765	153	47	2,965	n/a	n/a
Inactive Members - General Service Receiving Benefits		118,324	18,768	9,620	146,712	39,377	506
Inactive Members Eligible for, but not yet Receiving Benefits		6,332	5,461	8,249	20,042	11,751	n/a
Inactive Members Eligible for Refund Value of Account Only		1,740	7,245	n/a ¹	8,985	n/a	n/a
Inactive Members not Eligible for Refund or Retirement		0	0	20,293	20,293	n/a	n/a
Inactive Members - General Service Not Receiving Benefits		8,072	12,706	28,542	49,320	11,751	-
Total Inactive Members - General Service		126,396	31,474	38,162	196,032	51,128	506
Inactive Members - Police and Fire							
Retirees and Beneficiaries Currently Receiving Benefits		10,452	1,916	600	12,968	2,341	101
Alternate Payees Currently Receiving Benefits		600	36	10	646	n/a	n/a
Inactive Members - Police and Fire Receiving Benefits		11,052	1,952	610	13,614	2,341	101
Inactive Members Eligible for, but not yet Receiving Benefits		261	307	376	944	658	n/a
Inactive Members Eligible for Refund Value of Account Only		39	322	n/a ¹	361	n/a	n/a
Inactive Members not Eligible for Refund or Retirement		0	0	1,189	1,189	n/a	n/a
Inactive Members - Police and Fire Not Receiving Benefits		300	629	1,565	2,494	658	-
Total Inactive Members - Police and Fire		11,352	2,581	2,175	16,108	2,999	101
Active Members - General Service							
State Agencies		3,257	5,938	35,615	44,810	9,090	9,203
School Districts		4,444	11,125	58,246	73,815	15,497	n/a
Political Subdivisions		2,563	5,742	31,241	39,546	8,282	n/a
Community Colleges		402	1,074	5,652	7,128	1,470	n/a
Total Active Members - General Service		10,666	23,879	130,754	165,299	34,339	9,203
Active Members - Police and Fire							
State Agencies		344	1,190	4,438	5,972	1,530	1,506
School Districts		6	18	72	96	24	n/a
Political Subdivisions		396	1,964	7,197	9,557	2,360	n/a
Community Colleges		1	5	10	16	6	n/a
Total Active Members - Police and Fire		747	3,177	11,717	15,641	3,920	1,506
Grand Total Members		149,161	61,111	182,808	393,080	92,386	11,316

¹ Defined benefit only. No individual accounts are maintained.

codified into ORS 238.435. This legislation created a second tier of benefits for those who established membership on or after January 1, 1996. The second tier does not have the Tier One assumed earnings rate guarantee and has a higher normal retirement age of 60, compared to age 58 for Tier One.

As of June 30, 2022, there were 11,413 active plan members, 129,376 retired plan members or their beneficiaries currently receiving benefits, 8,372 inactive plan members entitled to but not yet receiving benefits, for a total of 149,161 Tier One members. For Tier Two members, as of June 30, 2022, there were 27,056 active plan members, 20,720 retired plan members or their beneficiaries currently receiving benefits, 13,335 inactive plan members entitled to but not yet receiving benefits, for a total of 61,111.

The 2003 Legislature enacted House Bill 2021, codified as ORS 238A, which created the Oregon Public Service Retirement Plan (OPSRP). OPSRP consists of the Pension Program and the Individual Account Program. Membership includes public employees hired on or after August 29, 2003.

As of June 30, 2022, there were 142,471 active plan members, 10,230 retired plan members or their beneficiaries currently receiving benefits, 8,625 inactive plan members entitled to but not yet receiving benefits, and 21,482 inactive plan members not eligible for refund or retirement, for a total of 182,808 OPSRP Pension Program members.

Beginning January 1, 2004, PERS active Tier One and Tier Two members became members of the Individual Account Program (IAP) of OPSRP. PERS members retain their existing Regular or Variable (if applicable) accounts, but member contributions are now deposited into the member's IAP account. Accounts are credited with earnings and losses net of administrative expenses. OPSRP is part of PERS and is administered by the Board. The PERS Board is directed to adopt any rules necessary to administer OPSRP, and such rules are to be considered part of the plan for IRS purposes.

C. Plan Benefits

1. PERS Pension (Chapter 238 – Tier One/Tier Two)

a. Pension Benefits

The PERS retirement allowance is payable monthly for life. Members may select from 13 retirement benefit options that are actuarially equivalent to the base benefit.

These options include survivorship benefits and lump-sum refunds. The basic benefit is based on years of service and final average salary. A percentage (2.0% for Police and Fire employees, 1.67% for General Service employees) is multiplied by the number of years of service and the final

average salary. Benefits may also be calculated under a formula plus annuity (for members who were contributing before August 21, 1981) or a money match computation if a greater benefit results. Monthly payments must be a minimum of \$200 per month or the member will receive a lump-sum payment of the actuarial equivalent of benefits to which he or she is entitled.

Under Senate Bill (SB) 1049, passed during the 2019 legislative session, the salary included in the determination of final average salary is limited for all members beginning in 2021. The limit was equal to \$210,582 as of January 1, 2022, and it is indexed with inflation every year.

Police and Fire members may purchase increased benefits that are payable between the date of retirement and age 65.

A member is considered vested and will be eligible at minimum retirement age for a service retirement allowance if he or she has had a contribution in each of five calendar years or has reached at least 50 years of age before ceasing employment with a participating employer (age 45 for Police and Fire members). General Service employees may retire after reaching age 55. Police and Fire members are eligible after reaching age 50. Tier One General Service employee benefits are reduced if retirement occurs prior to age 58 with fewer than 30 years of service. Police and Fire member benefits are reduced if retirement occurs prior to age 55 with fewer than 25 years of service. Tier Two members are eligible for full benefits at age 60. The plans are closed to new members hired on or after August 29, 2003.

A judge member who has made contributions to PERS during each of five calendar years shall receive a retirement allowance, payable monthly, for life. Before reaching age 60, judge members must choose the calculation formula under which they will retire. The election is irrevocable after the member attains age 60. The two formulas, A and B, are described in the following paragraph.

The Plan A retirement allowance for judge members is computed by multiplying 2.8125% by the final average salary for the first 16 years of service and 1.67% of the final average salary multiplied by the number of years of service as a judge in excess of 16. For most judge members, the maximum amount is limited to 65% of final average salary. The Plan B retirement allowance for judge members is computed by multiplying 3.75% by the final average salary for the first 16 years of service and 2.0% of the final average salary multiplied by the number of years of service as a judge in excess of 16. For most judge members, the maximum amount is limited to 75% of final average salary. Plan B requires a judge to serve up to 35 days per year for a period of five years as a pro tem judge. There is no actuarial reduction for retirement before age 65.

b. Death Benefits

Upon the death of a nonretired member, the beneficiary receives a lump-sum refund of the member's account balance (accumulated contributions and interest). In addition, the beneficiary receives a lump-sum payment from employer funds equal to the account balance, provided one or more of the following conditions are met:

- The member was employed by a PERS employer at the time of death.
- The member died within 120 days after termination of PERS-covered employment.
- The member died as a result of injury sustained while employed in a PERS-covered job.
- The member was on an official leave of absence from a PERS-covered job at the time of death.

A member's beneficiary may choose a monthly payment for life instead of the lump-sum or a combination of lump-sum and monthly payments, if eligible. The monthly payment must be a minimum of \$200 per month for deaths that occur after July 30, 2003.

c. Disability Benefits

A member with 10 or more years of creditable service who becomes disabled from other than duty-connected causes may receive a non-duty disability benefit. A disability resulting from a job-incurred injury or illness qualifies a member (including PERS judge members) for disability benefits regardless of the length of PERS-covered service. Upon qualifying for either a non-duty or duty disability, service time is computed to age 58 (55 for Police and Fire members) when determining the monthly benefit.

Judge members of PERS who have served a minimum of six consecutive years and who become physically or mentally incapacitated are entitled to benefits as provided in ORS 238.555.

d Benefit Changes After Retirement

Members may choose to continue participation in their variable account after retiring and may experience annual benefit fluctuations caused by changes in the fair value of the underlying global equity investments of that account.

Under ORS 238.360, monthly benefits are adjusted annually through cost-of-living changes (COLA). The COLA is capped at 2.0%.

2. OPSRP Pension Program

a. Pension Benefits

This portion of OPSRP provides a life pension funded by employer contributions. Benefits are

calculated with the following formula for members who attain normal retirement age.

Police and Fire: 1.8% multiplied by the number of years of service and the final average salary. Normal retirement age for Police and Fire members is age 60 or age 53 with 25 years of retirement credit. To be classified as a Police and Fire member, the individual must have been employed continuously as a Police and Fire member for at least five years immediately preceding retirement. General Service: 1.5% multiplied by the number of years of service and the final average salary. Normal retirement age for General Service members is age 65, or age 58 with 30 years of retirement credit.

Under Senate Bill 1049, passed during the 2019 legislative session, the salary included in the determination of final average salary is limited for all members beginning in 2021. The limit was equal to \$210,582 as of January 1, 2022, and is indexed with inflation every year.

A member of the pension program becomes vested on the earliest of the following dates: the date the member completes 600 hours of service in each of five calendar years, the date the member reaches normal retirement age, or, if the pension program is terminated, the date on which termination becomes effective.

b. Death Benefits

Upon the death of a nonretired member, the spouse or other person who is constitutionally required to be treated in the same manner as the spouse receives for life 50% of the pension that would otherwise have been paid to the deceased member. The surviving spouse or other person may elect to delay payment of the death benefit, but payment must commence no later than December 31 of the calendar year in which the member would have reached 70½ years of age.

c. Disability Benefits

A member who has accrued 10 or more years of retirement credits before the member becomes disabled or a member who becomes disabled from a job-related injury shall receive a disability benefit of 45% of the member's salary determined as of the last full month of employment before the disability occurred.

3. Individual Account Program

a. Benefit Terms

The IAP is an individual account-based program under the PERS tax-qualified governmental plan as defined under ORS 238A.400. An IAP member becomes vested on the date the employee account is established or on the date the rollover account was established. If the employer makes optional

employer contributions for a member, the contributions are deposited into a separate employer account. The member becomes vested in this account on the earliest of the following dates: the date the member completes 600 hours of service in each of five calendar years, the date the member reaches normal retirement age, the date the IAP is terminated, the date the active member becomes disabled, or the date the active member dies. The accounts fall under Internal Revenue Code Section 401(a).

Upon retirement, a member of the IAP may receive the amounts in his or her employee account, rollover account, and vested employer account as a lump-sum payment or in equal installments over a 5-, 10-, 15-, or 20-year period or an anticipated life-span option. Installment amounts vary with market returns as the account remains invested while in distribution. When chosen, the distribution option must result in a \$200 minimum distribution amount, or the frequency of the installments will be adjusted to reach that minimum.

b. Death Benefits

Upon the death of a nonretired member, the beneficiary receives in a lump sum the member's account balance, rollover account balance, and vested employer optional contribution account balance. If a retired member dies before the installment payments are completed, the beneficiary may receive the remaining installment payments or choose a lump-sum payment.

c. Recordkeeping

PERS contracts with Voya Financial to maintain IAP participant records.

4. Postemployment Healthcare Benefits

ORS 238.420 established the Retirement Health Insurance Account (RHIA) and authorizes a payment of up to \$60 from RHIA toward the monthly cost of health insurance for eligible PERS members. RHIA is a cost-sharing, multiple-employer OPEB plan for 898 participating employers. The plan was closed to new entrants hired on or after August 29, 2003.

To be eligible to receive this monthly payment toward the premium costs, the member must: (1) have eight years or more of qualifying service in PERS at the time of retirement or receive a disability allowance as if the member had eight years or more of creditable service in PERS, (2) receive both Medicare Parts A and B coverage, and (3) enroll in a PERS-sponsored health plan.

A surviving spouse or dependent of a deceased PERS retiree who was eligible to receive the subsidy is eligible to receive the subsidy if he or she (1) is receiving a retirement benefit or allowance from PERS or (2) was insured at the time the member died and the member retired before May 1, 1991.

For the fiscal year ended June 30, 2022, PERS employers contributed 0.05% of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIA benefits. No unfunded actuarial liability (UAL) rate was assigned for the RHIA program as it was funded over 100% as of December 31, 2019. Typically, PERS employers contribute an actuarially determined percent of all PERS-covered salaries to amortize the unfunded actuarial accrued liability over a fixed period with new unfunded actuarial accrued liabilities being amortized over 10 years. These rates were based on the December 31, 2019, actuarial valuation. This is included in the employer contribution rates listed in Table 3 below.

TABLE 3

Contribution Rate Summary ¹	Defined Benefit Pension					Postemployment Healthcare				
	PERS Defined Benefit Plan					OPSRP Pension Program		RHIA	RHIPA	
	Pooled Employers			Non-Pooled Employers		All Employers		All Employers	State Agencies	
	State Agencies ²	State and Local Government Rate Pool ³	School Pool ³	Political Subdivisions ^{3,4}	Judiciary	General Service	Police and Fire			
Employee IAP	6.00 %	6.00 %	6.00 %	6.00 %	0.00 %	6.00 %	6.00 %	0.00 %	0.00 %	
Employee Normal Cost	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00	
Employer Normal Cost	15.32	15.41	13.45	16.87	19.65	8.64	13.00	0.05	0.11	
Unfunded Actuarial Liability	5.04	12.67	14.09	11.77	4.91	1.69	1.69	0.00	0.17	
Total Employer Contributions	20.36 %	28.08 %	27.54 %	28.64 %	24.56 %	10.33 %	14.69 %	0.05 %	0.28 %	

¹Group average rates shown are effective July 1, 2021 through June 30, 2023.

²A subcomponent of the State and Local Government Rate Pool; includes UAL payment rate offset.

³Does not include UAL payment rate offsets.

⁴Non-pooled Political Subdivisions are valued separately for the Defined Benefit Plan.

Employer contributions are advance-funded on an actuarially determined basis. There is no inflation assumption for RHIA postemployment benefits because the payment amount is set by statute and is not adjusted for increases in healthcare costs. The number of inactive plan RHIA participants receiving benefits was 41,718 for the fiscal year ended June 30, 2022, and there were 38,259 active and 12,409 inactive members who meet the requirements to receive RHIA benefits when they retire.

ORS 238.415 established the Retiree Health Insurance Premium Account (RHIPA) and requires the Board on or before January 1 of each year to calculate the average difference between the health insurance premiums paid by retired state employees under contracts entered into by the Board and health insurance premiums paid by active state employees. ORS 238.415 authorizes payment of this average difference to qualified retired state employees. Retired state employees are qualified to receive this benefit if they had eight or more years of qualifying service with a state agency in the System at the time of retirement or are receiving a disability pension calculated as if they had eight or more years of qualifying service but are not eligible for federal Medicare coverage. RHIPA is a single-employer (the state as one employer) defined benefit OPEB plan and is closed to new entrants hired on or after August 29, 2003.

A surviving spouse or dependent of a deceased retired state employee is eligible to receive the subsidy if he or she (1) is receiving a retirement benefit or allowance from PERS or (2) was insured at the time the member died, and the member retired on or after September 29, 1991.

For the fiscal year ended June 30, 2022, state agencies contributed 0.05 and 0.11% of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIA and RHIPA benefits, respectively. State agencies contributed 0.17% of all PERS-covered salaries to amortize the unfunded actuarial accrued liability of the RHIPA program over a fixed period with new unfunded actuarial accrued liabilities being amortized over 10 years. The first 10-year amortization base for outstanding RHIA and RHIPA UAL amounts began December 31, 2007. These rates were based on the December 31, 2019, actuarial valuation. This is included in the employer contribution rates listed in Table 3 on the previous page.

The number of inactive plan RHIPA participants receiving benefits was 607 for the fiscal year ended June 30, 2022. As of June 30, 2022, there were 10,709 active members who meet the requirements to receive RHIPA benefits when they retire. Inactive members are not eligible for these benefits. All subsidy payments from the RHIA and RHIPA are

initially deposited in the Standard Retiree Health Insurance Account, as described in Note 8 on page 69, and subsequently remitted to the appropriate PERS health plan.

5. Deferred Compensation Plan

Deferred compensation plans are authorized under Internal Revenue Code Section 457. The Oregon Legislature enacted Chapter 179, Oregon Laws 1997, which established the Deferred Compensation Fund. ORS 243.400 to 243.507 established and provided for PERS to administer the state deferred compensation plan, known as the Oregon Savings Growth Plan (OSGP). As of June 30, 2022, the fair value of investments was \$2,486.7 million.

The plan is a benefit available to all state employees. To participate, an employee executes an individual agreement with the state deferring current earnings to be paid at a future date. Participants in the plan are not required to pay federal and state income taxes on the deferred contributions and earnings until the funds are received. Participants or their beneficiaries cannot receive the funds until at least one of the following occurs: termination by reason of resignation, death, disability, or retirement; unforeseeable emergency; or by requesting a *de minimis* distribution from inactive accounts valued less than \$5,000. A loan program is also available for eligible participants. Member loans receivable at June 30, 2022, totaled \$13.4 million. Of that amount, \$10.4 million is not expected to be collected within one year.

PERS contracts with Voya Financial to maintain OSGP participant records. The Oregon State Treasury, as custodian of the assets, also contracts with State Street Bank and Trust Company to provide financial services. There are 20 investment options with varying degrees of market risk. Up to five financial institutions provide investment services in mutual funds for each investment option. A participant receives a blend of these mutual funds within the investment option. Participants direct the selection of investment options and also bear any market risk. The Oregon State Treasury has no liability for losses under the plan but does have the prudent investor responsibility of due care. Total membership as of June 30, 2022, was 30,473.

PERS may assess a charge to the participants not to exceed 2.0% on amounts deferred, both contributions and investment earnings, to cover costs incurred for administering the program. Actual charges to participants, including investment charges, for the fiscal year ended June 30, 2022, averaged 0.19% of amounts deferred. Oregon Revised Statute 243.505 established a Deferred Compensation Advisory Committee to provide input to the PERS Board. This committee is composed of seven members who meet at least quarterly.

6. Standard Retiree Health Insurance Account

ORS 238.410 established the Standard Retiree Health Insurance Account (SRHIA), a public entity risk pool. SRHIA is both a risk sharing and insurance purchasing pool. The Board contracts for medical and hospital insurance on behalf of retired members. Members and their dependents are eligible for PERS healthcare coverage if the member is receiving a retirement allowance or benefit under the System. A surviving spouse or dependent of a PERS retiree is eligible to participate if he or she was covered under the health plan at the time of the retiree's death. As of June 30, 2022, there were 51,708 retirees and their dependents participating in the health insurance program.

PERS contracts with various contracted health plans (CHP) on a fully insured, conventionally funded insurance basis and remits premiums collected from participating members to the CHPs monthly. PERS contracts with Delta Dental of Oregon under a minimum premium arrangement. Under the minimum premium program, Delta Dental of Oregon agrees to split the rate into an agreed upon fixed claims rate (referred to as maximum premium), and an agreed upon fixed amount to cover non-claims related costs (referred to as the minimum premium). In addition, claims are invoiced on a weekly basis as Delta Dental makes payments for services delivered to covered PERS members. A settlement is required after calendar year end to reconcile that the claims payments did not exceed the contractual maximum liability established during the annual renewal process. The current estimate of incurred but not reported (IBNR) for Delta Dental of Oregon insurance claims is \$848,000.

D. Contributions

PERS' funding policy provides for periodic member and employer contributions at rates established by the Board, subject to limits set in statute. The rates established for member and employer contributions were approved based on the recommendations of the System's third-party actuary.

1. Member Contributions

Beginning January 1, 2004, all member contributions, except for contributions by judge members, were placed in the OPSRP Individual Account Program (IAP). Prior to that date, all member contributions were credited to the Defined Benefit Pension Plan. Member contributions are set by statute at 6.0 or 7.0% of salary and are remitted by participating employers. The contributions are either deducted from member salaries or paid by the employers on the members' behalf.

The Member Reserve, described in Note 6.A., represents accumulated member contributions and earnings allocations made prior to January 1, 2004,

and subsequent earnings allocations less refunds and amounts transferred to reserves for retirements and disabilities. The IAP member accounts represent member contributions made on or after January 1, 2004, plus earnings allocations less disbursements for refunds, death benefits, and retirements.

Starting July 1, 2020, Senate Bill 1049 required a portion of member contributions to their IAP accounts to be redirected to the Defined Benefit fund. In 2022, if the member earns more than \$3,333 per month, 0.75% (if OPSRP member) or 2.5% (if Tier One/Tier Two member) of the member's contributions that were previously contributed to the member's IAP now fund the new Employee Pension Stability Accounts (EPSA). The EPSA accounts will be used to fund the cost of future pension benefits without changing those benefits, which means reduced contributions to the member's IAP account. Members may elect to make voluntary IAP contributions equal to the amount redirected.

a. Employee Pension Stability Accounts

EPSA was created by the Oregon Legislature through Senate Bill 1049 (2019) to address the increasing cost of funding pension benefits. EPSA's function is to help pay for part of an applicable member's lifetime monthly pension benefit when they retire.

EPSA rules apply to most PERS members, but the EPSA redirect is only triggered when the member's gross pay in a month exceeds the monthly salary threshold, tied to the annual Consumer Price Index (All Urban Consumers, West Region). EPSA accounts are credited with investment earnings and losses annually, and have no guaranteed rate of return. Tier One and Tier Two EPSA accounts earn the Tier Two rate, and OPSRP EPSA accounts earn the OPSRP Plan rate. Tier One, Tier Two, and OPSRP members may have EPSA account balances eligible for withdrawal if the member stops working for all PERS-covered employers and/or all control groups under a PERS-covered employer and is not yet eligible for service retirement. OPSRP pension plan members who withdraw their EPSA and IAP will completely cancel membership in OPSRP, including forfeiting all accumulated retirement or service credit and potential retirement benefits. The redirect to EPSA remains in effect when the PERS system is less than 90% funded.

b. Target-Date Funds

The Oregon Investment Council, responsible for all PERS fund investments, approved the transition to a target-date fund investment methodology for all IAP accounts beginning January 1, 2018. This change in investment methodology reflects an investment best practice that will better protect participants from potential losses as they approach and enter retirement by gradually reducing investment risk as participants age. Participants are placed in a target-date fund based on their year of birth. Investments in each fund will adjust over time

to reduce investment risk and potential losses in market downturns. As the participant moves toward retirement, the investments in the fund gradually shift, becoming more conservative to help protect against market fluctuations.

2. Employer Contributions

PERS funding policy provides for monthly employer contributions at actuarially determined rates. These contributions, expressed as a percentage of covered payroll, are intended to accumulate sufficient assets to pay benefits when due. This funding policy applies to the PERS Defined Benefit Plan and OPEB plans. Employer contribution rates during the period were based on the December 31, 2019, actuarial valuation, which became effective July 1, 2021. The state of Oregon and certain schools, community colleges, and political subdivisions have made supplemental unfunded actuarial liability payments, and their rates have been reduced. See the contribution rate summary provided in Table 3 on page 46. Effective January 1, 2020, Senate Bill 1049 requires employers to pay contributions on re-employed PERS retirees' salaries as if they were active members, excluding IAP (6%) contributions. Re-employed retirees do not accrue additional benefits while they work after retirement.

a. PERS Defined Benefit Plan (ORS 238)

Effective July 1, 2021, the contribution rate for State Agencies was 20.36%, the State and Local Government Rate Pool 28.08%, School Districts 27.54%, and judiciary 24.56% of PERS-covered salaries. Political subdivisions that have not joined the State and Local Government Rate Pool had an average pension rate of 28.64%.

Oregon Laws 2001, Chapter 945, Section 13 authorized the establishment of the State and Local Government Rate Pool. Local political subdivisions were given the option to join the state of Oregon and community colleges for the actuarial purpose of calculating employer rates. Participation by local political subdivisions in this pool was effective for the actuarial valuation period beginning January 1, 2002. Oregon Laws 2001, Chapter 945, Section 13 authorized the establishment of the School Districts Pool. Local political subdivisions were given the option to join the state of Oregon and community colleges for the actuarial purpose of calculating employer rates while all education service districts, school districts, and charters schools were/are required to join the School Districts Pool. Participation in these pools was effective for the actuarial valuation period beginning January 1, 2002.

Based on the actuarial valuation as of December 31, 2019, the state agencies, the judiciary, and political subdivisions all had increases in employer contribution rates on July 1, 2021, while schools had a decrease in employer contribution rates. These rate changes are measured against the actual

average rates paid since the last rate-setting valuation. Every two years, the PERS Board adjusts contributions so that, over time, those contributions will be sufficient to fund the benefits earned, if earnings follow assumptions.

b. OPSRP Pension Program (ORS 238A)

All PERS employers with OPSRP Pension Program members are actuarially pooled and share the same contribution rate. The OPSRP Pension Program employer rates effective July 1, 2021, through June 30, 2022, are 10.33% of covered salaries for General Service employees and 14.69% of covered salaries for Police and Fire employees. These rates increased from 9.85% of covered salaries for General Service and 14.48% of covered salaries for Police and Fire employees for the period July 1, 2019, through June 30, 2021. Each of these rates includes a component related to disability benefits for General Service and Police and Fire members.

Note 3 - Receivables and Payables

A. Receivables

Table 4 disaggregates accounts receivable balances reported in the Statement of Fiduciary Net Position. The Strunk and Eugene Accrual resulted from recalculating benefits for recipients who received overpayments based on the reallocation of 1999 earnings. Approximately 91% of these overpayments were received as of June 30, 2022; \$4.7 million is expected to be collected within the next year.

TABLE 4

<u>Accounts Receivable</u>	<u>June 30, 2022</u>
Broker Receivables	\$ 3,233,213,854
Transition Liability	305,741,323
Interest and Dividends Receivable	155,423,369
Employer and Member Receivables	75,387,448
Strunk and Eugene Accrual	6,210,735
Other	25,811,526
Total Accounts Receivable	\$ 3,801,788,255

B. Payables

Table 5 on page 50 disaggregates payable balances reported in the Statement of Fiduciary Net Position as Investment Purchases and Accrued Expenses.

Note 4 - Investments

The Oregon State Treasury is the investment officer for the state of Oregon. Investment standards are established in ORS 293.726 and require funds to be managed as a prudent investor would do. The

TABLE 5

<u>Accounts Payable</u>	<u>June 30, 2022</u>
Broker Payable	\$ 4,509,592,293
Pension Roll	441,957,218
Investment Fees	23,449,546
Death Benefits	40,589,735
Compensated Absences	3,414,400
Services and Supplies	2,547,722
Other	5,160,666
Total Accounts Payable	\$ 5,026,711,580

Oregon Investment Council (OIC) establishes policies for the investment and reinvestment of moneys in the Oregon Public Employees Retirement Fund. Policies are established based on the primary investment asset class of each investment manager and do not reflect the classifications of individual holdings as presented in the financial statements. Contracts with individual investment managers provide additional guidelines that vary from manager to manager.

A. Deposits

PERS cash and cash equivalents consist of cash on hand, deposits in the Oregon Short Term Fund (OSTF), moneys held by external investment managers, cash equivalents held by the health insurance provider, and cash held by the IAP program custodian. OSTF is a cash and investment pool that operates as a demand deposit account and is required for use by all state funds. See Table 6.

OSTF is separately audited by the Oregon Audits Division. The audited financial statements are available at: <https://sos.oregon.gov/audits/Documents/2022-26.pdf>. OSTF investment risks are addressed in the notes to those financial statements.

Health Insurance Claims Fund of \$2.9 million was held at U.S. Bank. The account is identified as Public Funds; therefore, any amount in the account above Federal Deposit Insurance Corporation (FDIC) was collateralized by the Public Funds Collateralization Program.

TABLE 6

<u>Depository Account</u>	<u>Bank Balance</u>
Insured	\$ 750,000
Oregon Short Term Fund	3,029,835,902
Health Insurance Claims Fund	2,698,415
IAP On Demand Deposit	3,532,285
Uninsured and Uncollateralized	1,945,509,206
Total Deposits	\$ 4,982,325,808

TABLE 7

<u>Investments as of June 30, 2022</u>	<u>Fair Value</u>
U.S. Treasury Obligations	\$ 7,405,478,728
U.S. Treasury Obligations - Strips	706,365,325
U.S. Treasury Obligations - TIPS	142,561,012
U.S. Federal Agency Mortgage Securities	852,601,921
U.S. Federal Agency Mortgage TBAs	1,327,169,790
U.S. Federal Agency Debt	101,343,055
U.S. Federal Agency Strips	429,313
International Debt Securities	1,153,680,734
Non-U.S. Government Debt Securities	1,395,606,265
Corporate Bonds	1,600,651,572
Bank Loans	1,288,904,402
Municipal Bonds	35,833,562
Collateralized Mortgage Obligations	499,310,353
Commercial Mortgage Backed Securities	90,217,654
Asset-Backed Securities	406,154,657
Guaranteed Investment Contracts ¹	302,017,127
Domestic Fixed Income Funds	960,016,206
Global Fixed Income Funds	893,258,617
Repurchase Agreements	39,700,000
Total Debt Securities	19,201,300,293
Derivatives in Asset Positions	5,841,579
Domestic Equity Securities	11,035,418,382
International Equity Securities	6,804,294,094
Domestic Equity Funds	3,597,615,173
Global Equity Funds	684,340,569
International Equity Funds	758,844,722
Target Date Funds	789,884,105
Oregon Savings Growth Plan - Self Directed	38,822,527
Total Public Equity	23,715,061,151
Real Estate and Real Estate Investment Trusts	13,484,899,469
Private Equity	24,588,062,306
Real Assets	7,493,706,329
Diversifying Strategies	5,192,616,827
Opportunity Portfolio	2,248,492,239
Total PERS Investments - Fiduciary Funds	\$ 95,924,138,614

¹Guaranteed Investment Contracts are stated at contract value.

1. Custodial Credit Risk

Custodial credit risk for deposits is the risk that in the event of a bank failure, PERS' deposits may not be recovered. As noted above, the deposit and investment risks, including custodial risk, of the OSTF deposits are outlined in the OSTF financial statements. As of June 30, 2022, the carrying amount of PERS' deposits in OSTF totaled \$3,015.4 million and the corresponding bank balance was \$3,030.1 million. Investment managers' deposits with custodian banks consist of cash and cash equivalents that represent buying reserves. As of June 30, 2022, there was a sum of \$1,945.8 million on deposit for the accounts of the OPERF investment managers.

As of June 30, 2022, the IAP On Demand Deposit Account of \$3.8 million was held at State Street Bank, the custodian of the IAP program third-party administrator. The balance on the deposit is insured by the FDIC up to the standard maximum deposit insurance amount. The balance in excess of the FDIC limit was uninsured and uncollateralized.

2. Foreign Currency Risk

Foreign currency risk for deposits is the risk that changes in exchange rates will adversely affect the fair value of the deposits. Foreign currency risk is controlled via contractual agreements with the investment managers. As of June 30, 2022, the sum of \$277.8 million in cash and cash equivalents was exposed to foreign currency risk. The U.S. dollar balances of these deposits, organized by currency denomination, are presented in Table 12 on page 57.

3. Restricted Cash Equivalents

PERS' cash and cash equivalents as of June 30, 2022, include collateral of \$594.2 million held by investment managers. Swap collateral is offset by a related liability with a net settlement feature. Collateral is restricted and is not available to pay current liabilities.

B. Investments

Table 7 on page 50 lists the fair value of investments held by the state of Oregon for PERS as of June 30, 2022.

1. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Observable inputs are developed based on market data obtained from sources independent of the reporting entity. Unobservable inputs are developed based on the best information available about the assumptions market participants would use in pricing the asset.

The classification of investments within the fair value hierarchy is based upon the activity level in the market for the security type and the inputs used to determine their fair value. The three levels of the hierarchy are described below:

Level 1 – Unadjusted quoted prices for identical instruments in active markets.

Level 2 – Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-derived valuations in which all significant inputs are observable.

Level 3 – Valuations derived from valuation techniques in which significant inputs are unobservable.

Inputs used to measure fair value might fall in different levels of the fair value hierarchy. Categorization within the hierarchy is based on the lowest level input that is significant to the fair value measurement.

Equity securities are generally valued based on quoted prices from an active market and are therefore categorized in level 1. In the absence of

quoted market prices, such as equity securities that trade infrequently or not at all, valuations are based on the last traded price or a price provided by investment managers.

Debt securities classified as level 2 are valued using the latest bid prices or evaluated quotes from independent pricing vendors. The third-party vendors use a variety of methods when pricing these securities that incorporate relevant observable market data to arrive at an estimate of what a buyer in the marketplace would pay for a security under current market conditions. When independent price sources are not available, debt securities are priced based on the last traded price or a valuation provided by the investment manager and are categorized in level 3.

Funds priced using a net asset value (NAV) that is published daily and validated with a sufficient level of observable activity are categorized in level 1. If observable activity is limited yet supports that the NAV represents an exit value of the security at the measurement date, the securities are categorized in level 2. Investments that are measured at NAV as a practical expedient, such as most private equity, real assets, diversifying strategies, opportunity, and real estate investments, are excluded from the fair value hierarchy if the NAV per share (or its equivalent) was calculated in a manner consistent with the Financial Accounting Standards Board's measurement principles for investment companies. Funds not meeting this criteria are categorized in level 3.

Exchange-traded derivatives, including futures, rights, and warrants, that are actively traded are valued using quoted prices and are categorized in level 1. Derivative contract valuations, such as swaps and options, are modeled using observable pricing inputs and techniques that do not entail material subjectivity and are therefore categorized in level 2. Level 3 derivatives include securities valued at a price that has been determined by the investment manager's valuation committee.

Investments in real estate, other than real estate investment trusts, which are generally valued based on an active market price and are categorized in level 1, have been valued based on the NAV per share (or its equivalent), as provided by the general partner. This type includes 64 commingled real estate funds, structured as limited partnerships, where the funds have a finite term. Distributions from the funds will be received as the underlying investments of the funds are liquidated. Liquidation is expected to take place during the five-year period following the termination of the investment period, which extends to 2035. Investments in real estate also include 16 joint ventures where the investments are expected to be held for the long term and generate cash flow that will represent a significant component of the total return. Real

estate also includes investments in 13 open-ended funds that permit quarterly redemption of shares, subject to certain requirements being met.

Private equity consists of approximately 207 funds, organized as limited partnerships and limited liability companies, participating in diversified strategies including leveraged buyouts, venture capital, growth equity, fund-of-funds, co-investments, and special situations. The fair values of the private equity investments have been determined using the NAV per share (or its equivalent) as provided by the general partner or managing member. These funds have a finite term. Distributions will be received as the underlying investments of the funds are liquidated, which is expected to occur over the next 12 to 14 years.

Real asset and diversifying asset investments seek to provide diversification and inflation-hedging characteristics to the fund. They include

investments with a focus on infrastructure and natural resources. Real assets consists of 83 investments in commingled funds organized as limited partnerships and limited liability companies. The fair values of the investments have been determined using a NAV per share (or its equivalent) of the investments. For real asset infrastructure and natural resource investments, which includes 68 of the 83 funds, the funds have a finite term. Distributions will be received as the underlying investments of the funds are liquidated, which is expected to occur over the next 10 to 14 years. The remaining 15 funds are open-ended, permitting periodic redemption of shares, subject to certain requirements being met. They consist of 14 funds investing in diversifying hedge strategies, and one fund investing in a risk parity strategy.

The opportunity portfolio includes strategies that fall outside of other asset classes and include 24 funds investing in a broad range of performing and distressed

TABLE 8

		Fair Value Measurements Using			
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
		<u>6/30/2022</u>			
Investments and Derivative Instruments Measured at Fair Value					
Investments by Fair Value Level					
Debt Securities					
U.S. Treasury Obligations	\$	7,405,478,728	\$ -	\$ 7,405,478,728	\$ -
U.S. Treasury Obligations - Strips		706,365,325	-	706,365,325	-
U.S. Treasury Obligations - TIPS		142,561,012	-	142,561,012	-
U.S. Federal Agency Mortgage Securities		852,601,921	-	852,599,948	1,973
U.S. Federal Agency Mortgage TBAs		1,327,169,790	-	1,303,699,872	23,469,918
U.S. Federal Agency Debt		101,343,055	-	101,343,055	-
U.S. Federal Agency Strips		429,313	-	429,313	-
Non-Government Debt Securities		1,395,606,265	-	1,395,606,265	-
Corporate Bonds		2,050,010,369	-	1,985,046,984	64,963,385
Bank Loans		1,348,659,219	-	1,210,694,354	137,964,865
Municipal Bonds		35,833,562	-	35,833,562	-
Collateralized Mortgage Obligations		660,247,450	-	659,619,113	628,337
Commercial Mortgage Backed Securities		90,313,624	-	90,313,624	-
Asset-Backed Securities		889,688,710	-	847,377,648	42,311,062
Domestic Fixed Income Funds		960,016,206	-	960,016,206	-
Global Fixed Income Funds		893,258,617	-	893,258,617	-
Repurchase Agreements		39,700,000	-	39,700,000	-
Total Debt Securities ¹		<u>18,899,283,166</u>	<u>-</u>	<u>18,629,943,626</u>	<u>269,339,540</u>
Public Equity					
Domestic Equity Securities		11,035,418,382	10,988,766,827	-	46,651,555
International Equity Securities		6,804,294,094	6,791,873,048	-	12,421,046
Domestic Equity Funds		3,597,615,173	-	3,597,615,173	-
Global Equity Funds		684,340,569	-	684,340,533	36
International Equity Funds		758,844,722	534,841,768	129,134,738	94,868,216
Target Date Fund		789,884,105	-	789,884,105	-
Oregon Savings Growth Plan - Self Directed		38,822,527	38,822,527	-	-
Total Public Equity		<u>23,709,219,572</u>	<u>18,354,304,170</u>	<u>5,200,974,549</u>	<u>153,940,853</u>
Real Estate Investment Trusts		591,019,171	591,019,171	-	-
Total Investments by Fair Value Level	\$	<u>43,199,521,909</u>	<u>18,945,323,341</u>	<u>\$ 23,830,918,175</u>	<u>\$ 423,280,393</u>

TABLE 8 continues on the next page

Notes to the Financial Statements

TABLE 8 continuing from the previous page

Investments Measured at the Net Asset Value (NAV)

Real Estate	
Real Estate Investments	\$ 9,834,443,080
Real Estate Open Ended Funds	3,059,437,218
Total Real Estate	12,893,880,298
Private Equity	24,588,062,306
Real Assets	7,493,706,329
Diversifying Strategies	5,192,616,827
Opportunity Portfolio	
Opportunity Private Investments	1,250,079,598
Opportunity Open Ended Funds	998,412,641
Total Opportunity Portfolio	2,248,492,239
Total Investments Measured at the NAV	52,416,757,999
Total Investments Measured at Fair Value	\$ 95,616,279,908

Investments Derivative Instruments

Credit Default Swaps	\$ 133,050	\$ -	\$ 133,050	\$ -
Foreign Exchange Forwards	(291,710,186)	-	(291,710,186)	-
Interest Rate Swaps	4,858,207	-	4,858,207	-
Options	362,453	178,734	183,719	-
Rights and Warrants	291,577	210,937	-	80,640
Total Return Swaps	196,292	196,292	-	-
Total Assets	(285,868,607)	585,963	(286,535,210)	80,640
Credit Default Swaps	(2,090,180)	-	(2,090,180)	-
Foreign Exchange Forwards	447,805,935	-	447,805,935	-
Interest Rate Swaps	(8,686,229)	-	(8,686,229)	-
Options	(3,127,742)	-	(3,127,742)	-
Total Return Swaps	(10,194,965)	-	(10,194,965)	-
Total Liabilities	423,706,819	-	423,706,819	-
Total Investments Derivative Instruments	\$ 137,838,212	\$ 585,963	\$ 137,171,609	\$ 80,640

Invested Securities Lending Collateral

Asset-Backed Securities	\$ 6,118,813	\$ -	\$ 6,118,813	\$ -
Negotiable Certificates of Deposit	100,998,867	-	100,998,867	-
Commercial Paper	28,985,282	-	28,985,282	-
Corporate Bonds	66,951,684	-	66,951,684	-
Repurchase Agreements	251,200,000	-	251,200,000	-
Total Invested Securities Lending Collateral²	\$ 454,254,646	\$ -	\$ 454,254,646	\$ -

¹Guaranteed Investment Contracts are excluded from the table as these are stated at contract value.

²For OSTF's participation in securities lending activity of \$5,329,546, refer to their audited financial statements at: <https://sos.oregon.gov/audits/Documents/2022-26.pdf>

TABLE 9

Investments Measured at the Net Asset Value

	Fair Value	Unfunded Commitments*	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Real Estate				
Real Estate Investments	\$ 9,834,443,080	\$ 3,528,736,996	n/a	n/a
Real Estate Open Ended Funds	3,059,437,218	108,375,345	Quarterly	15 - 90 days
Private Equity	24,588,062,306	7,541,355,639	n/a	n/a
Real Assets	7,493,706,329	3,187,452,427	n/a	n/a
Diversifying Strategies	5,192,616,827	-	Monthly	3- 90 days
Opportunity Portfolio				
Opportunity Private Investments	1,250,079,598	983,897,815	n/a	n/a
Opportunity Open Ended Funds	998,412,641	295,928,675	Monthly, Quarterly	5-90 days
Total	\$ 52,416,757,999	\$ 15,645,746,897		

* Excludes unfunded commitments associated with investments included in the fair value hierarchy (Levels 1, 2, and 3) and new commitments not yet funded at 6/30/2022.

debt and debt-related securities as well as royalties and insurance-based investments. The fair values of the investments have been determined using a NAV per share (or its equivalent) of the investments. For 18 of the 24 funds, the funds have a finite term. Distributions will be received as the underlying investments of the funds are liquidated, which is expected to occur over the next 7 to 10 years. The remaining six funds are open-ended, permitting periodic redemption of shares.

PERS has recurring fair value measurements as of June 30, 2022, as shown in Table 8 on page 52. Disclosures regarding redemption and investments valued at the NAV per share (or its equivalent), including Unfunded Commitments, are presented in Table 9 above.

2. Rate of Return

For the fiscal year ended June 30, 2022, the annual money-weighted rate of return on defined benefit pension plan investments, net of defined benefit pension plan investment expenses, was 6.16%. The annual money-weighted rates of return on the other postemployment healthcare benefits (OPEB) investments, net of OPEB investment expenses, were 6.49% for the Retirement Health Insurance Account (RHIA) and 6.82% for the Retiree Health Insurance Premium Account (RHIPA). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the timing of cash flows and the changing amounts actually invested.

3. Investment Concentrations

As of June 30, 2022, there were no organizations that represent 5% or more of the pension plan's fiduciary net position or total investments.

4. Credit Risk Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. OIC has no formal policy regarding credit risk. As of June 30, 2022, the fair value of below grade investments, excluding unrated securities, is \$1,335.8 million, or 12.52%, of total securities subject to credit risk and 6.96% of total debt securities. The weighted quality rating average is AA-. Unrated securities include \$582.6 million in bank loans, \$1,469.3 million in domestic and global fixed income funds, \$302.0 million in guaranteed investment contracts, and \$658.6 million in other debt securities. Unrated federal agency securities include \$173.7 million in Federal Home Loan Mortgage Corporation (FHLMC), \$1,490.3 million in Federal National Mortgage Association (FNMA), and \$265.1 million in other federal agency securities. These federal agency securities are not rated by the credit rating agencies as these are implicitly guaranteed by the U.S. government. Table 10 on the next page details the quality ratings for credit risk debt securities as of June 30, 2022.

5. Custodial Credit Risk

Custodial credit risk for investments is the risk that in the event of a failure of the counterparty, PERS will not be able to recover the value of the investments or collateral securities that are in the possession of an outside party. OIC has no formal policy regarding the holding of securities by a custodian or counterparty. As of June 30, 2022, investment securities (excluding cash, cash equivalents, and repurchase agreements held as securities lending collateral) are registered and held in the name of the OIC, for the benefit of PERS, and are not exposed to custodial credit risk.

Notes to the Financial Statements

TABLE 10

<u>Schedule of Credit Risk at June 30, 2022</u>	
<u>Quality Rating</u>	<u>Fair Value</u>
AAA	\$ 1,215,636,765
AA	610,333,928
A	961,446,692
BBB	1,606,258,436
BB	309,269,660
B	712,214,910
CCC	242,848,709
CC	63,987,553
C	1,092,736
D	6,348,682
Not Rated	3,012,620,133
Not Rated - U.S. Agency ¹	1,929,128,425
Total Subject to Credit Risk	10,671,186,629
U.S. Government Guaranteed Securities	8,530,113,664
Total Debt Securities	\$ 19,201,300,293

¹ Federal Agency securities are not rated by the credit rating agencies as they carry an implicit guarantee of the U.S. Government. See Credit Risk Debt Securities note disclosure on the previous page for more detail.

TABLE 11

<u>Schedule of Interest Rate Risk - Effective Duration at June 30, 2022</u>		
<u>Investments</u>	<u>Fair Value</u>	<u>Effective Weighted Duration Rate (in years)</u>
U.S. Treasury Obligations	\$ 7,405,478,728	3.07
U.S. Treasury Obligations - Strips	706,365,325	0.25
U.S. Treasury Obligations - TIPS	142,561,012	4.88
U.S. Federal Agency Mortgage Securities	852,601,921	6.56
U.S. Federal Agency Mortgage TBAs	1,320,039,240	4.00
U.S. Federal Agency Debt	101,343,055	2.85
U.S. Federal Agency Strips	429,313	18.91
International Debt Securities	1,153,680,734	4.60
Non-U.S. Government Debt Securities	1,395,606,265	4.36
Corporate Bonds	1,600,635,982	5.80
Bank Loans	1,281,036,618	6.40
Municipal Bonds	35,833,562	4.27
Collateralized Mortgage Obligations	499,310,353	8.28
Commercial Mortgage Backed Securities	90,217,654	6.81
Asset-Backed Securities	406,154,657	4.60
Domestic Fixed Income Funds	960,016,206	5.33
Global Fixed Income Funds	893,258,617	6.48
Repurchase Agreements	39,700,000	0.00 ¹
No Effective Duration:		
U.S. Federal Agency Mortgage TBAs	7,130,550	N/A
Corporate Bonds	15,590	N/A
Bank Loans	7,867,784	N/A
Guaranteed Investment Contracts	302,017,127	N/A
Total Debt Securities	19,201,300,293	
Cash Equivalent - Mutual Funds - STIF	1,267,067,682	11 days ²
Cash Equivalent - Oregon Short Term Fund	2,098,356,870	185 days ²
Total Subject to Interest Rate Risk	\$ 22,566,724,845	

¹0.001 year
²Weighted average maturity. Pools are not rated.

6. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed within the portfolio using the effective duration methodology. As of June 30, 2022, the weighted average duration of PERS' fixed income portfolio was 4.31 years.

Effective duration is a measure of a fixed income investment's exposure to fair value changes arising from changes in interest rates. Effective duration makes assumptions regarding the most likely timing and amounts of variable cash flows. These assumptions take into consideration factors indicative of investments that are highly sensitive to interest rate changes, including callable options, prepayments, and other factors. These factors are reflected in the effective duration numbers provided herein. No individual fixed income investment manager's portfolio was outside the policy guidelines as of June 30, 2022. Table 11 on the previous page shows the investments by type, amount, and effective weighted duration.

At June 30, 2022, PERS held approximately \$1,442.1 million in debt instruments backed by pooled mortgages, collateralized mortgage obligations, commercial mortgage backed securities, or fixed-rate mortgages. These securities represent a stream of principal and interest payments from underlying mortgages. Assets with these characteristics are susceptible to prepayment by the mortgage holders, which may result in a decrease in total interest realized. The value of these securities can be volatile as interest rates fluctuate. Additionally, the risk of default exists and collateral held may potentially be insufficient to cover the principal due. PERS also held approximately \$1,327.2 million in To-Be-Announced (TBA) federal agency-issued mortgage pools. An additional \$406.2 million of debt instruments held are asset-backed securities backed primarily by automobiles, consumer credit receivables, student loan receivables, and heavy equipment leases.

7. Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. As of June 30, 2022, approximately 6.61% of the debt investment portfolio was invested in non-dollar denominated securities. Policies for PERS' portfolio do not limit non-dollar denominated investments. PERS utilizes a currency overlay manager to reduce risk through offsetting investments in the developed foreign currency market for international equity portfolios. See Table 12 on the next page.

8. Unfunded Commitments

OIC has entered into agreements that commit OPERF, upon request, to make additional investment purchases up to a predetermined

amount. As of June 30, 2022, the OPERF had \$4,888.1 million in commitments to purchase real estate investments and \$9,911.0 million in commitments to purchase private equity investments, which include \$6,392 million in callable distributions. There were \$3,548.7 million in commitments to purchase real assets, which includes \$1,074 million in callable distributions. Additionally, there were \$1,279.8 million in commitments to purchase opportunity portfolio investments, which include \$664 million in callable distributions. These amounts are unfunded and are not recorded in the Statement of Fiduciary Net Position.

C. Securities Lending

In accordance with state investment policies, OPERF participates in securities lending transactions. Through securities lending authorization agreements, the Oregon State Treasury has authorized its custodian, State Street Bank, to lend its securities pursuant to the terms and conditions of policy and applicable agreements. Both OPERF and the borrowers maintained the right to terminate all securities lending transactions on demand. There were no significant violations of the provisions of securities lending agreements during the period of these financial statements.

During the period of these financial statements, the custodian had the authority to loan short-term, fixed income, and equity securities and to receive as collateral U.S. dollar and foreign currency cash, U.S. government and agency securities, letters of credit, and foreign sovereign debt of Organization of Economic Cooperation and Development (OECD) countries. Borrowers were required to deliver collateral for each loan equal to or not less than 102% of the fair value of loaned U.S. securities and international fixed income securities, or 105% in the case of international equity. The custodian did not have the ability to pledge or sell collateral securities absent a borrower default, and OPERF did not impose any restrictions during the fiscal year on the amount of the loans the custodian made on its behalf. OPERF is fully indemnified against losses caused by borrower default by its current custodian. There were no losses during the year from the failure of borrowers to return loaned securities and no recoveries of amounts from prior losses.

The maturities of investments made with cash collateral did not generally match the maturities of the securities loaned. Because the securities loaned are callable on demand by either the lender or borrower, the life of the loans at June 30, 2022, is effectively one day. On June 30, 2022, OPERF had no credit risk exposure to borrowers because the amounts OPERF owes borrowers exceeds the amounts borrowers owe OPERF.

On June 30, 2022, the fair value of cash collateral received and invested cash collateral were \$454.0

Notes to the Financial Statements

TABLE 12

Currency Exposures by Asset Class in US Dollar Equivalents as of June 30, 2022

Currency	Cash and Cash Equivalents		Debt Securities	Public Equity	Derivatives in Asset Positions	Real Estate	Real Assets and Diversifying Strategies	Total						
Argentine peso	\$	2,659	\$	-	\$	-	\$	2,659						
Australian dollar		6,097,412		36,863,547		54		374,598,479						
Brazilian real		1,810,122		-				90,112,304						
Canadian dollar		7,752,359		30,103,451				502,713,392						
Chilean peso		483,059		-				2,408,359						
Chinese yuan renminbi		98,452,905		73,327,034				167,217,091						
Colombian peso		4,055		798,629				208,831						
Czech koruna		6,658		1,026,536				1,570,792						
Danish krone		262,960		2,075,776				187,217,006						
Egyptian pound		1,864		-		580		2,152,073						
Euro		95,982,924		501,248,737		4,639		1,238,875,527						
Hong Kong dollar		4,117,848		-			119,829	494,356,250						
Hungarian forint		2,241		391,568				4,283,776						
Indian rupee		1,451,601		-				117,626,017						
Indonesian rupiah		554,286		10,565,165				34,241,188						
Israeli shekel		205,095		15,255,877				53,615,341						
Japanese yen		11,074,812		314,581,163			1,975,241	970,855,636						
Kenya shilling		847,287		-				818,523						
Kuwaiti dinar		40,697		-				703,054						
Malaysian ringgit		561,313		9,096,686		1,503,209		31,651,121						
Mexican peso		4,295,039		29,512,190				39,843,596						
New Taiwan dollar		3,462,650		-				208,622,846						
New Zealand dollar		1,034,257		2,806,157				7,590,918						
Nigerian naira		785,065		-				4,170,423						
Norwegian krone		398,639		373,775				80,829,955						
Pakistani rupee		77,347		-				4,736,121						
Peruvian nuevo sol		2,838		6,344,347				9,939						
Philippine peso		62,813		-				9,598,403						
Polish zloty		257,174		1,381,103				13,674,838						
Pound sterling		24,575,452		211,205,451			980,133	951,770,894						
Qatari rial		68,726		-				24,282,446						
Romanian leu		-		668,162				1,344,914						
Russian ruble		704,043		1,677,576				36,320,402						
Saudi Arabian riyal		545,531		-			44,095	44,136,324						
Singapore dollar		873,108		9,825,642		5,795	11,759,215	93,112,247						
South African rand		788,554		4,125,531				67,535,216						
South Korean won		2,633,449		-		18,098	14,045	248,720,339						
Swedish krona		1,640,361		1,078,209				131,152,334						
Swiss franc		5,404,748		-		196,293		400,127,566						
Thailand baht		377,579		4,099,895		620,433	417,039	32,518,242						
Turkish lira		73,086		-				13,549,068						
United Arab Emirates dirham		18,139		-				11,597,666						
Vietnamese dong		13,097		-				1,523,635						
Total Subject to Foreign Currency Risk	\$	277,803,852	\$	1,268,432,207	\$	6,558,728,276	\$	2,349,101	\$	54,117,886	\$	2,878,091,907	\$	11,039,523,229

million and \$453.9 million, respectively. The cumulative unrealized loss in invested cash collateral of \$98,510 has been recognized in securities lending income in the Statement of Changes in Fiduciary Net Position in the period in which the gain or losses occurred. For the fiscal year ended June 30, 2022, total income from securities lending activity was \$6.8 million, and total expenses for the period were \$2.4 million for a net gain of \$4.4 million.

Oregon Short Term Fund (OSTF) also participates in securities lending activity. OPERF receives an allocated portion of this activity based on its deposits in OSTF. As of June 30, 2022, OPERF's allocated portion of cash collateral received and invested cash collateral were \$5.3 million and \$5.3 million, respectively.

Cash collateral received for OSTF securities lent is invested in securities lending collateral pools and is not exposed to custodial risk. For more

information on OSTF's participation in securities lending activity, refer to their audited financial statements:

<https://sos.oregon.gov/audits/Documents/2022-26.pdf>.

Table 13 shows the combined balances of the securities on loan, cash and securities collateral received and investments of cash collateral held. Table 14 and 15 disclose how the cash collateral received was invested. Securities lending collateral subject to credit risk as of June 30, 2022, is shown in Table 14. Securities lending collateral subject to interest rate risk as of June 30, 2022, is shown in Table 15 on page 59.

D. Derivative Instruments

Oregon Investment Council policy allows, with some restrictions, for the use of derivative instruments in the prudent management of OPERF investments. Certain internally and externally managed accounts are allowed, through contract

TABLE 13

Securities Lending as of June 30, 2022

Investment Type	Securities on Loan at Fair Value	Cash and Securities Collateral Received	Investments of Cash Collateral at Fair Value
U.S. Treasury Securities	\$ 42,776,731	\$ 43,548,285	\$ 2,373,235
U.S. Agency Securities	50,961,362	51,768,626	-
Domestic Equity Securities	390,082,730	404,937,993	345,057,146
Domestic Debt Securities	64,583,979	65,724,545	69,167,660
International Equity Securities	76,097,911	81,224,524	37,270,129
Allocation from Oregon Short Term Fund	6,528,184	6,656,330	5,329,546
Total	\$ 631,030,897	\$ 653,860,303	\$ 459,197,716

and policy, to invest in derivative instruments to carry out their investment management activities.

Risks inherent with derivatives are managed through investment management's adherence to contractual and policy prescribed terms that are consistent with OPERF's investing objectives.

All derivative instruments held by OPERF are considered investments. The fair value of OPERF derivative investments is reported in the Investment Sales and Other Receivables, Investment Purchases and Accrued Expenses, and the Public Equity lines of the Statement of Fiduciary Net Position - Pension and Other Postemployment Plans on pages 33 and 34. Changes in fair value during the fiscal year are reported in the Net Appreciation/Depreciation in Fair Value of Investments line of the Statement of Changes in Fiduciary Net Position - Pension and Other Postemployment Plans on pages 35 and 36.

Table 16 on page 60 presents the fair value amounts, the related net appreciation/(depreciation) in fair value amounts, and the notional amounts of derivative instruments outstanding as of June 30, 2022.

A forward foreign currency exchange contract is a forward contract that is a commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. The fair value of a foreign currency forward is determined by the difference between the contract exchange rate and the closing exchange rate at the end of a reporting period. Risks associated with such contracts include movement in the value of foreign currencies and the ability of the counterparty to perform.

A futures contract represents a commitment to purchase or sell an underlying asset at a future date and at a specified price. Futures contracts have standardized terms and are traded on exchanges. The counterparty credit risk for futures is generally less than for privately negotiated forward contracts,

since the clearinghouse, which is the issuer or counterparty to each exchange-traded future, settles daily the net change in the futures contract's value in cash with the broker and results in the contract itself having no fair value at the end of any trading day.

A swap is an agreement that obligates two parties to exchange a series of cash flows or the net value of cash flows at specified intervals based upon, or calculated by, reference to changes in specified prices or rates for a specified amount of an underlying asset. Swaps are privately negotiated contracts with customized terms and are transacted in over-the-counter markets. OPERF held various types of swaps including credit default, interest rate, and total return swaps. The payment flows are usually netted against each other, with the difference being paid by one party or another. In addition, collateral may be pledged or received by OPERF in accordance with the terms of the respective swap agreements to provide value and recourse to OPERF or its counterparties. Swaps are subject to general market risk, liquidity risk, credit risk, interest rate risk, and the risk that the counterparty may fail to perform.

An option is an instrument that gives one party the right, but not the obligation, to buy or sell an underlying asset from or to another party at a fixed price over a specified period of time. In writing an option, OPERF bears the market risk of an unfavorable change in the price of the underlying investment of the written option. Exercise of an option written by OPERF could result in OPERF selling or buying an asset at a price different from the current fair value. Options may be subject to interest rate risk, general market risk, liquidity risk, credit risk, foreign currency risk, and, for non-exchange traded options, the risk of the counterparty's ability to perform.

Rights are the right, but not the obligation, to purchase newly issued equity shares, often in proportion to the number of shares currently

TABLE 14

<u>Securities Lending Invested Cash Collateral Subject to Credit Risk as of June 30, 2022</u>	
<u>Quality Rating</u>	<u>Fair Value</u>
AAA	\$ 6,118,813
AA ¹	130,972,890
A	75,962,943
Total Subject to Credit Risk	213,054,646
U.S. Government Guaranteed Repurchase Agreements	241,200,000
Allocation from Oregon Short Term Fund	5,329,546
Cash	71,516
Payable	(457,992)
Total Securities Lending Invested Cash Collateral	\$ 459,197,716

¹ Commercial paper ratings of A-1+/A-1 categorized as AA.

TABLE 15

<u>Securities Lending Invested Cash Collateral Subject to Interest Rate Risk as of June 30, 2022</u>		
<u>Security Type</u>	<u>Fair Value</u>	<u>Effective Weighted Duration Rate (in days)¹</u>
Asset-Backed Securities	\$ 6,118,813	69
Negotiable Certificates of Deposit	100,998,867	47
Corporate Bonds	28,985,282	103
Commercial Paper	66,951,684	52
Repurchase Agreements	10,000,000	2
Total Subject to Interest Rate Risk	213,054,646	27
U.S. Government Guaranteed Repurchase Agreements	241,200,000	
Allocation from Oregon Short Term Fund	5,329,546	
Cash	71,516	
Payable	(457,992)	
Total Securities Lending Invested Cash Collateral	\$ 459,197,716	

¹ Weighted average days to maturity or next reset date.

TABLE 16

Derivative Instruments as of June 30, 2022

Investment Derivatives	Net Appreciation/ (Depreciation) in		Classification	Fair Value	Notional Value ²
	Fair Value of Investments ^{1,3}				
Commodity Futures Long	\$	41,647,527	Public Equity	\$ -	\$ 66,586,589
Commodity Futures Short		(7,870,761)	Public Equity	-	(1,005)
Credit Default Swaps Bought		3,612,188	Public Equity	89,255	34,640,000
Credit Default Swaps Written		(40,255,185)	Public Equity	(2,046,385)	363,033,243
Fixed Income Futures Long		(579,947,520)	Public Equity	-	3,948,897,553
Fixed Income Futures Short		56,840,332	Public Equity	-	(394,110,503)
Fixed Income Options Bought		1,790,216	Public Equity	148,531	2,100,000
Fixed Income Options Written		(6,057,334)	Public Equity	(2,576,553)	(364,776,660)
Foreign Currency Options Bought		50,727	Public Equity	35,187	4,502,500
Foreign Currency Options Written		(97,659)	Public Equity	(35,968)	(4,079,500)
Foreign Exchange Forwards		721,542,754	Receivables/Payables	156,095,749	24,561,268,049
Futures Options Bought		(2,023,380)	Public Equity	178,734	93,000
Futures Options Written		5,115,601	Public Equity	(515,220)	(524,000)
Index Futures Long		(97,929,209)	Public Equity	-	23,114,766
Index Futures Short		198,159,817	Public Equity	-	(2,558,415)
Pay Fixed Interest Rate Swaps		152,161,099	Public Equity	31,788,549	1,686,208,661
Receive Fixed Interest Rate Swaps		(132,012,337)	Public Equity	(35,616,571)	904,401,735
Rights		148,444	Public Equity	20,240	190,277
Total Return Swaps Bond		254,331	Public Equity	678,919	20,386,065
Total Return Swaps Equity		37,218,606	Public Equity	(10,677,592)	(106,673,518)
Warrants		100,696	Public Equity	271,337	1,225,914
Total	\$	352,448,953		\$ 137,838,212	\$ 30,743,924,751

¹ Negative values (in brackets) refer to losses.

² Notional may be a dollar amount or size of underlying for futures, rights, warrants, and options. Negative values refer to short positions.

³ Excludes futures margin payments.

owned, in a specified company at a pre-established price on or within a predetermined date. A warrant provides the holder the right, but not the obligation, to purchase securities from the issuing entity at a specific price and within a certain time period. In the OPERF portfolio, rights and warrants are often obtained and held because of existing investments and are subject to general market risk and liquidity risk.

1. Counterparty Credit Risk

Table 17 on page 61 presents a summary of counterparty credit ratings relating to derivative instruments in asset positions as of June 30, 2022.

2. Interest Rate Risk

As of June 30, 2022, OPERF is exposed to interest rate risk on its various swap arrangements and options. Table 18 on page 61 presents a segmented time schedule of those instruments, and Table 19, on pages 62 through 64, shows a schedule of derivative instruments that were highly sensitive to interest rate changes.

3. Foreign Currency Risk

OPERF is exposed to foreign currency risk on its

derivative instruments. Table 20 on page 65 presents a summary of derivative instruments subject to foreign currency risk as of June 30, 2022.

Note 5 - Capital Assets and Leases Used in Plan Operations

Capital construction of PERS' headquarters in Tigard, Oregon, was completed May 31, 1997. The land, building, and improvements are recorded at cost. The depreciation of the building and improvements is computed on the straight-line method over the estimated useful life of 40 years.

Data processing hardware, furniture, and equipment are recorded at cost. These are items that are not consumed in the normal course of operations, have a useful life of more than one year, and are valued at \$5,000 or more. Depreciation is computed using the straight-line method over the assets' estimated useful lives. Useful lives range from 3 to 10 years.

Data processing software generated internally as part of the Oregon Retirement Information Online Network (ORION) Project is recorded at cost. The useful life is amortized using the straight-line method over 20 years. See Table 21 on page 66.

TABLE 17

<u>Derivative Instruments Subject to Counterparty Credit Risk as of June 30, 2022</u>					
Counterparty Name	Percentage of Net Exposure	S&P Rating	Fitch Rating	Moody's Rating	
Morgan Stanley Capital Services Inc	16.90%	A-	A	A1	
UBS AG	8.86%	A+	AA-	Aa3	
JP Morgan Chase Bank N.A.	6.67%	A+	AA	Aa2	
Citibank N.A.	6.66%	A+	A+	Aa3	
Toronto Dominion Bank	6.31%	AA-	AA-	A1	
JP Morgan Chase Bank N.A. London	5.63%	A+	AA	Aa2	
Credit Agricole CIB	5.18%	A+	A+	Aa3	
State Street Bank London	4.57%	A	AA-	A1	
NatWest Markets PLC	4.56%	A-	A+	A2	
Morgan Stanley CME	4.27%	A-	A	A1	
Société Générale	4.18%	A	A-	A1	
Standard Chartered Bank	3.42%	A+	A+	A1	
Westpac Banking Corporation	3.37%	AA-	A+	Aa3	
HSBC Bank PLC	3.36%	A-	A+	A3	
HSBC Bank USA	3.12%	A+	AA-	Aa3	
Goldman Sachs Bank USA	2.56%	BBB+	A	A2	
Morgan Stanley LCH	1.94%	A-	A	A1	
BNP Paribas SA	1.66%	A+	A+	Aa3	
State Street Bank and Trust Company	1.47%	AA-	AA	Aa3	
Bank of America, N.A.	0.81%	A+	AA	Aa2	
JP Morgan Chase Bank N.A.	0.72%	A+	AA	Aa2	
Royal Bank of Canada (U.K)	0.71%	AA-	AA-	A1	
Barclays Bank PLC Wholesale	0.68%	A	A+	A1	
Goldman Sachs International	0.52%	A+	A+	A1	
The Bank of New York Mellon	0.52%	AA-	AA	Aa2	
Bank of New York	0.46%	A	AA-	A1	
Barclays Bank LCH	0.25%	A	A+	A1	
Royal Bank of Canada	0.25%	AA-	AA-	A1	
Morgan Stanley and Co. International PLC	0.14%	A-	A	A1	
Morgan Stanley Co Incorporated	0.11%	A-	A	A1	
Australia and New Zealand Banking Group	0.06%	AA-	A+	Aa3	
Deutsche Bank AG	0.05%	A-	BBB+	A2	
JP Morgan ICE	0.03%	A-	AA-	A2	
	100.00%				

TABLE 18

<u>Derivative Instruments Subject to Interest Rate Risk as of June 30, 2022</u>						
Investment Type	Fair Value	Investment Maturities (in years)				
		Less Than 1	1 - 5	6 - 10	More Than 10	
Credit Default Swaps Bought	\$ 89,255	\$ (61,958)	\$ 153,225	\$ -	\$ (2,012)	
Credit Default Swaps Written	(2,046,385)	8,299	(2,054,684)	-	-	
Fixed Income Options Bought	148,531	-	148,531	-	-	
Fixed Income Options Written	(2,576,553)	(1,813,444)	(763,109)	-	-	
Pay Fixed Interest Rate Swaps	31,788,549	-	12,578,816	7,973,478	11,236,255	
Receive Fixed Interest Rate Swaps	(35,616,571)	-	(9,693,854)	(13,702,706)	(12,220,011)	
Total Return Swaps Bond	678,919	678,919	-	-	-	
Total Return Swaps Equity	(10,677,592)	(10,677,592)	-	-	-	
Total	\$ (18,211,847)	\$ (11,865,776)	\$ 368,925	\$ (5,729,228)	\$ (985,768)	

TABLE 19

Derivative Instruments Highly Sensitive to Interest Rate Changes as of June 30, 2022			
Investment Type	Reference Rate	Fair Value	Notional Value
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.0000%	\$ 533,434	\$ 3,500,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.7500%	4,802,215	26,600,000
Pay Fixed Interest Rate Swaps	Receive Variable 1-Month US CPI, Pay Fixed 2.3295%	48,367	500,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month Euro EURIBOR , Pay Fixed 0.0000%	87,509	313,635
Pay Fixed Interest Rate Swaps	Receive Variable 1-Month US CPI, Pay Fixed 2.2740%	964,697	9,300,000
Pay Fixed Interest Rate Swaps	Receive Variable 1-Month US CPI, Pay Fixed 2.3450%	114,101	1,200,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.2500%	743,423	8,148,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.3500%	2,834,168	32,928,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month AUD BBSW, Pay Fixed 1.7500%	666,643	3,850,840
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 1.72875%	2,168,069	12,286,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.2500%	1,267,316	17,100,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month CHF SARON, Pay Fixed 0.5000%	-	13,370,241
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 1.5200%	3,001,284	14,048,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 0.7100%	5,773,257	62,100,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month Euro EURIBOR, Pay Fixed 0.5000%	176,141	522,725
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month Euro EURIBOR, Pay Fixed 0.2500%	-	54,781,574
Pay Fixed Interest Rate Swaps	Receive Variable 12-month GBP SONIA, Pay Fixed 0.7500%	118,667	850,115
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month Euro EURIBOR, Pay Fixed 0.4140%	-	11,395,404
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 1.5600%	1,294,657	6,050,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 1.7334%	566,283	13,290,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month US CPI, Pay Fixed 2.9500%	494,178	13,300,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month MYR KLIBOR, Pay Fixed 3.2500%	295,288	4,492,343
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 1.5200%	626,714	20,770,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month US CPI, Pay Fixed 3.9700%	549,664	18,270,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month MYR KLIBOR, Pay Fixed 3.5000%	7,088	158,820
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month MYR KLIBOR, Pay Fixed 3.5000%	13,164	294,952
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month JPY TONAR, Pay Fixed 0.4465%	105,353	662,471
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.0390%	-	14,427,146
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.0390%	-	2,355,452
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 1.3200%	2,292,641	122,500,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 1.6300%	3,370,183	17,330,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month INR MIBOR, Pay Fixed 5.7500%	300,754	6,575,707
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month Euro EURIBOR, Pay Fixed 1.0000%	864,150	21,327,178
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 1.6500%	508,720	2,660,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 1.4300%	2,630	100,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.2700%	1,255,719	55,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 2.11678%	320,859	21,800,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 1.8500%	1,473,095	126,400,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 2.0000%	475,535	7,331,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 1.7500%	1,106,326	23,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.8000%	78,689	1,398,550
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.7000%	-	736,079
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.2500%	-	2,061,021
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.5000%	-	3,459,571
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 2.5000%	150,557	6,610,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.4500%	-	2,944,315
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 2.6000%	120,678	13,741,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month CAD CDOR, Pay Fixed 2.2500%	1,279,414	10,465,522
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 2.78234%	26,407	28,460,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 2.96478%	(327,166)	46,000,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.1415%	(102,387)	35,439,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.05876%	(66,786)	6,200,000

TABLE 19 continues on the next page

Notes to the Financial Statements

TABLE 19 continuing from the previous page

Investment Type	Reference Rate	Fair Value	Notional Value
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.4000%	\$ (3,157,230)	\$ 496,701,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.0220%	(121,324)	10,962,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.3000%	(4,211,607)	190,368,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.2000%	(1,102,988)	33,321,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.1765%	-	24,652,000
Subtotal - Pay Fixed Interest Rate Swaps		31,788,549	1,686,208,661
Receive Fixed Interest Rate Swaps	Receive Fixed 7.4500%, Pay Variable 1-Month MXN TIE	(1,038,105)	13,367,533
Receive Fixed Interest Rate Swaps	Receive Fixed 7.4400%, Pay Variable 1-Month MXN TIE	(1,088,391)	13,916,211
Receive Fixed Interest Rate Swaps	Receive Fixed 1.000%, Pay Variable 3-Month CAD CDOR	(725,360)	7,907,283
Receive Fixed Interest Rate Swaps	Receive Fixed 1.2500%, Pay Variable 3-Month CAD CDOR	(28,505)	155,045
Receive Fixed Interest Rate Swaps	Receive Fixed 0.2500%, Pay Variable 6-Month Euro EURIBOR	(2,937,980)	11,395,404
Receive Fixed Interest Rate Swaps	Receive Fixed 0.5000%, Pay Variable 6-Month Euro EURIBOR	(389,669)	1,045,450
Receive Fixed Interest Rate Swaps	Receive Fixed 3.7400%, Pay Variable 1-month GBP UKRPI	(162,694)	1,214,450
Receive Fixed Interest Rate Swaps	Receive Fixed 3.7000%, Pay Variable 1-month GBP UKRPI	(326,903)	2,307,455
Receive Fixed Interest Rate Swaps	Receive Fixed 0.5000%, Pay Variable 6-Month Euro EURIBOR	(1,943,522)	6,899,969
Receive Fixed Interest Rate Swaps	Receive Fixed 0.0000%, Pay Variable 6-Month Euro EURIBOR	-	313,635
Receive Fixed Interest Rate Swaps	Receive Fixed 0.8200%, Pay Variable 3-month LIBOR	(2,999,189)	128,660,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.5000%, Pay Variable 3-month LIBOR	(338,157)	8,700,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.000%, Pay Variable 12-Month CHF SARON	(870,140)	13,370,241
Receive Fixed Interest Rate Swaps	Receive Fixed 0.0000%, Pay Variable 12-Month JPY TONAR	(98,829)	14,427,147
Receive Fixed Interest Rate Swaps	Receive Fixed 0.5000%, Pay Variable 12-Month JPY TONAR	(120,092)	3,459,571
Receive Fixed Interest Rate Swaps	Receive Fixed 0.0000%, Pay Variable 12-Month JPY TONAR	(39,579)	2,355,452
Receive Fixed Interest Rate Swaps	Receive Fixed 0.2500%, Pay Variable 6-Month Euro EURIBOR	(6,618,477)	36,360,747
Receive Fixed Interest Rate Swaps	Receive Fixed 1.0000%, Pay Variable 6-Month Euro EURIBOR	(2,592,460)	25,090,797
Receive Fixed Interest Rate Swaps	Receive Fixed 2.0000%, Pay Variable 3-Month KRW KSDA	(1,190,578)	10,724,199
Receive Fixed Interest Rate Swaps	Receive Fixed 2.7700%, Pay Variable 12-Month US CPI	(345,309)	13,300,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.0000%, Pay Variable 3-Month NZD NZDDB	(102,499)	8,517,978
Receive Fixed Interest Rate Swaps	Receive Fixed 2.0600%, Pay Variable 3-Month CAD CDOR	(188,694)	11,628,358
Receive Fixed Interest Rate Swaps	Receive Fixed 0.4500%, Pay Variable 12-Month JPY TONAR	(429,047)	2,944,316
Receive Fixed Interest Rate Swaps	Receive Fixed 0.5000%, Pay Variable 12-month GBP SONIA	(946,229)	10,201,380
Receive Fixed Interest Rate Swaps	Receive Fixed 0.5000%, Pay Variable 12-month GBP SONIA	(271,544)	6,315,140
Receive Fixed Interest Rate Swaps	Receive Fixed 2.0000%, Pay Variable 3-Month CAD CDOR	(86,712)	5,194,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.0000%, Pay Variable 3-Month NZD NZDDB	(117,179)	9,574,953
Receive Fixed Interest Rate Swaps	Receive Fixed 3.3700%, Pay Variable 0-Month US CPI	(275,638)	18,270,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.0000%, Pay Variable 6-Month JPY TONAR	(36,376)	4,710,905
Receive Fixed Interest Rate Swaps	Receive Fixed 0.0000%, Pay Variable 6-Month JPY TONAR	(219,193)	5,741,415
Receive Fixed Interest Rate Swaps	Receive Fixed 0.5000%, Pay Variable 12-Month SOFR	(533,834)	11,300,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.7500%, Pay Variable 12-month GBP SONIA	(928,306)	3,036,125
Receive Fixed Interest Rate Swaps	Receive Fixed 1.0000%, Pay Variable 12-Month SOFR	(1,577,703)	14,300,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.6170%, Pay Variable 3-month LIBOR	(250,762)	3,000,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.2940%, Pay Variable 12-Month CHF SARON	(125,424)	3,342,560
Receive Fixed Interest Rate Swaps	Receive Fixed 0.3425%, Pay Variable 12-Month CHF SARON	(220,299)	5,640,570
Receive Fixed Interest Rate Swaps	Receive Fixed 0.2950%, Pay Variable 12-Month CHF SARON	(47,319)	1,253,460
Receive Fixed Interest Rate Swaps	Receive Fixed 5.7500%, Pay Variable 12-Month INR MIBOR	(551,713)	40,067,112
Receive Fixed Interest Rate Swaps	Receive Fixed 5.7500%, Pay Variable 6-Month INR MIBOR	(96,661)	2,113,394
Receive Fixed Interest Rate Swaps	Receive Fixed 2.0000%, Pay Variable 6-Month THB THBXF	(48,882)	560,034
Receive Fixed Interest Rate Swaps	Receive Fixed 0.2500%, Pay Variable 12-Month JPY TONAR	(36,374)	2,061,021
Receive Fixed Interest Rate Swaps	Receive Fixed 0.7000%, Pay Variable 12-Month JPY TONAR	(59,988)	736,079
Receive Fixed Interest Rate Swaps	Receive Fixed 2.0000%, Pay Variable 6-Month THB THBXF	(20,491)	234,762
Receive Fixed Interest Rate Swaps	Receive Fixed 0.5000%, Pay Variable 6-Month Euro EURIBOR	-	21,327,178
Receive Fixed Interest Rate Swaps	Receive Fixed 0.6444%, Pay Variable 6-Month Euro EURIBOR	(808,082)	7,098,605
Receive Fixed Interest Rate Swaps	Receive Fixed 1.6950%, Pay Variable 12-Month SOFR	(315,099)	3,600,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.6900%, Pay Variable 6-Month Euro EURIBOR	(378,996)	3,439,530
Receive Fixed Interest Rate Swaps	Receive Fixed 2.0000%, Pay Variable 6-Month THB THBXF	(186,769)	2,206,194
Receive Fixed Interest Rate Swaps	Receive Fixed 0.3675%, Pay Variable 12-Month CHF SARON	(333,557)	8,565,310
Receive Fixed Interest Rate Swaps	Receive Fixed 2.0000%, Pay Variable 6-Month THB THBXF	(66,904)	766,511

TABLE 19 continues on the next page

TABLE 19 continuing from the previous page

Investment Type	Reference Rate	Fair Value	Notional Value
Receive Fixed Interest Rate Swaps	Receive Fixed 2.0000%, Pay Variable 6-Month THB THBFXF	(2,222)	25,456
Receive Fixed Interest Rate Swaps	Receive Fixed 1.7500%, Pay Variable 12-Month SOFR	(1,982,083)	22,500,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.7500%, Pay Variable 12-Month SOFR	(314,881)	1,800,000
Receive Fixed Interest Rate Swaps	Receive Fixed 11.0300%, Pay Variable 0-month Brazil BRCDI	(207,609)	5,067,454
Receive Fixed Interest Rate Swaps	Receive Fixed 3.0000%, Pay Variable 3-Month KRW KSDA	(80,059)	3,019,177
Receive Fixed Interest Rate Swaps	Receive Fixed 2.4700%, Pay Variable 0-Month SOFR	(942,838)	83,213,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.0000%, Pay Variable 6-Month Euro EURIBOR	(31,697)	3,868,165
Receive Fixed Interest Rate Swaps	Receive Fixed 2.1750%, Pay Variable 12-Month SOFR	(102,436)	2,900,000
Receive Fixed Interest Rate Swaps	Receive Fixed 11.9850%, Pay Variable 0-month Brazil BRCDI	(84,692)	4,971,842
Receive Fixed Interest Rate Swaps	Receive Fixed 3.7500%, Pay Variable 3-Month NZD NZDDB	(74,305)	5,782,277
Receive Fixed Interest Rate Swaps	Receive Fixed 12.0900%, Pay Variable 0-month Brazil BRCDI	(58,048)	4,015,719
Receive Fixed Interest Rate Swaps	Receive Fixed 4.0000%, Pay Variable 3-Month MYR KLIBOR	9,721	1,270,562
Receive Fixed Interest Rate Swaps	Receive Fixed 4.0000%, Pay Variable 3-Month MYR KLIBOR	15,796	2,064,663
Receive Fixed Interest Rate Swaps	Receive Fixed 3.2500%, Pay Variable 3-Month KRW KSDA	(1,378)	322,705
Receive Fixed Interest Rate Swaps	Receive Fixed 2.7700%, Pay Variable 0-Month SOFR	(160,359)	33,131,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.2500%, Pay Variable 6-Month THB THBFXF	2,831	101,824
Receive Fixed Interest Rate Swaps	Receive Fixed 3.2500%, Pay Variable 6-Month THB THBFXF	12,894	463,866
Receive Fixed Interest Rate Swaps	Receive Fixed 4.0000%, Pay Variable 3-Month NZD NZDDB	(20,730)	8,331,453
Receive Fixed Interest Rate Swaps	Receive Fixed 2.7500%, Pay Variable 6-Month THB THBFXF	(9,225)	506,293
Receive Fixed Interest Rate Swaps	Receive Fixed 2.95103%, Pay Variable 12-Month SOFR	(59,721)	28,460,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.96466%, Pay Variable 12-Month SOFR	(19,062)	9,600,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.96815%, Pay Variable 12-Month SOFR	(32,760)	17,000,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.02628%, Pay Variable 12-Month SOFR	(13,530)	14,200,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.00387%, Pay Variable 12-Month SOFR	(9,698)	7,300,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.88642%, Pay Variable 12-Month SOFR	200,477	23,100,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.7500%, Pay Variable 6-Month SGD IBOR	4,164	1,580,800
Receive Fixed Interest Rate Swaps	Receive Fixed 3.53117%, Pay Variable 12-Month SOFR	52,563	7,000,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.4000%, Pay Variable 12-Month SOFR	(105,324)	9,900,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.3700%, Pay Variable 12-Month SOFR	(63,658)	3,600,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.4859%, Pay Variable 12-Month SOFR	24,301	3,600,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.52695%, Pay Variable 12-Month SOFR	44,630	6,000,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.00494%, Pay Variable 12-Month SOFR	46,596	2,500,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.1000%, Pay Variable 0-Month SOFR	1,401,858	15,283,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.1660%, Pay Variable 0-Month SOFR	58,126	17,271,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.8920%, Pay Variable 0-Month SOFR	-	8,877,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.6570%, Pay Variable 0-Month SOFR	-	13,057,000
Subtotal - Receive Fixed Interest Rate Swaps		(35,616,571)	904,401,735
Total Interest Rate Swaps		\$ (3,828,022)	\$ 2,590,610,396

TABLE 20

Derivative Instruments Subject to Foreign Currency Risk as of June 30, 2022					
Currency Name	Currency Forward Contracts		Options/Rights/ Warrants	Swaps	Total Exposure
	Net Receivables	Net Payables			
Australian dollar	\$ (25,659,591)	\$ 21,219,276	\$ 54	\$ 666,643	\$ (3,773,618)
Bahraini dinar	1,473	(74,126)	-	-	(72,653)
Brazilian real	15,191,779	(17,709,507)	-	(350,349)	(2,868,077)
Canadian dollar	(23,976,515)	10,920,348	-	419,709	(12,636,458)
Chilean peso	(3,049,503)	2,286,198	-	-	(763,305)
Colombian peso	(3,857,281)	1,929,198	-	-	(1,928,083)
Czech koruna	(2,384,897)	2,820,491	-	-	435,594
Danish krone	(3,145,347)	14,163,928	-	-	11,018,581
Egyptian pound	(223,619)	2,674	580	-	(220,365)
Euro ¹	(18,064,517)	71,909,460	(90,661)	(15,961,266)	37,793,016
Hong Kong dollar	(189,017)	231,558	-	-	42,541
Hungarian forint	(3,555,758)	960,990	-	-	(2,594,768)
Indian rupee	(3,529,921)	1,688,618	-	(347,620)	(2,188,923)
Indonesian rupiah	(394,466)	543,161	-	-	148,695
Japanese yen	(90,963,112)	178,128,314	-	(1,251,606)	85,913,596
Kuwaiti dinar	(4,973)	3,381	-	-	(1,592)
Malaysian ringgit	19,098	565,924	-	341,057	926,079
Mexican peso	4,043,579	(4,413,341)	-	(2,126,496)	(2,496,258)
Moroccan dirham	(115,001)	25,072	-	-	(89,929)
New Israeli sheqel	(5,191,825)	12,004,879	-	-	6,813,054
New Taiwan dollar	(2,140,426)	6,180,022	-	-	4,039,596
New Zealand dollar	(24,162,289)	20,426,382	-	(314,712)	(4,050,619)
Norwegian krone	(49,642,841)	32,113,126	-	-	(17,529,715)
Peruvian nuevo sol	54,219	(466,917)	-	-	(412,698)
Philippine peso	(1,242,921)	908,158	-	-	(334,763)
Polish zloty	(12,915,222)	6,601,492	-	-	(6,313,730)
Pounds sterling	(15,699,450)	43,626,048	(19,057)	(2,517,010)	25,390,531
Romanian leu	(860,639)	463,774	-	-	(396,865)
Russian ruble	17,808,642	(6,240,561)	-	-	11,568,081
Saudi riyal	17,813	(21,913)	-	-	(4,100)
Singapore dollar	(2,490,277)	3,541,431	-	4,164	1,055,318
South African rand	(9,812,469)	4,642,371	-	-	(5,170,098)
South Korean won	(5,629,193)	11,518,026	18,098	(1,272,015)	4,634,916
Swedish krona	(11,148,960)	19,845,546	-	65,363	8,761,949
Swiss franc	5,759,439	(5,299,851)	-	(1,350,605)	(891,017)
Thailand baht	(396,114)	414,625	64,477	(318,769)	(235,781)
Turkish lira	(292,894)	(25,338)	-	-	(318,232)
United Arab Emirates dirham	(1,511)	1,481	-	-	(30)
Yuan renminbi	(116,753)	(1,041,640)	-	-	(1,158,393)
Yuan renminbi - offshore	(2,650,253)	2,314,504	-	-	(335,749)
Total Subject to Foreign Currency Risk	(280,611,513)	436,707,262	(26,509)	(24,313,512)	131,755,728
U.S. dollar	-	-	(2,447,203)	8,529,687	6,082,484
Total	\$ (280,611,513)	\$ 436,707,262	\$ (2,473,712)	\$ (15,783,825)	\$ 137,838,212

¹ Represents all of the positions with a Euro leg. It is not solely USD/Euro activity.

PERS leases a building from Pacific Realty Associates, L.P. which ends on July 31, 2023. The total amount of payments on the lease comes to \$644,022. There is an early termination fee based on the tenant's improvement allowance and broker commission, and there is sublease availability. PERS also leases two copiers, with

payments for the Ricoh lease ending on February 28, 2026 with total lease payments of \$33,514, and payments for the Sharp lease ending on November 30, 2023 with total lease payments of \$146,013. Future minimum lease payments are shown in table 21. Beginning balances were immaterial and no restatement was recorded.

TABLE 21

Schedule of Changes in Capital Assets for the Fiscal Year Ended June 30, 2022

	Beginning of Year	Increases	Decreases	End of Year
Capital assets, not being depreciated or amortized:				
Land	\$ 944,463	\$ -	\$ -	\$ 944,463
Total capital assets, not being depreciated or amortized	944,463	-	-	944,463
Capital assets, being depreciated or amortized:				
Furniture and Equipment	1,345,519	114,248	(15,034)	1,444,733
Data Processing Software	40,618,388	91,188	-	40,709,576
Data Processing Hardware	2,386,918	448,740	-	2,835,658
Building and Building Improvements	9,210,403	990,469	(42,491)	10,158,381
Right-To-Use-Asset - Building Lease	-	644,023	-	644,023
Right-To-Use-Asset - Equipment Lease	-	167,306	-	167,306
Total capital assets being depreciated or amortized	53,561,228	2,455,975	(57,525)	55,959,678
Less accumulated depreciation or amortization for:				
Furniture and Equipment	(1,289,515)	(40,558)	-	(1,330,073)
Data Processing Software	(24,798,812)	(1,896,035)	-	(26,694,847)
Data Processing Hardware	(1,500,313)	(444,683)	-	(1,944,996)
Building and Building Improvements	(5,133,738)	(387,857)	-	(5,521,595)
Right-To-Use-Asset - Building Lease	--	(295,177)	-	(295,177)
Right-To-Use-Asset - Equipment Lease	--	(87,648)	-	(87,648)
Total accumulated depreciation or amortization	(32,722,378)	(3,151,958)	--	(35,874,336)
Total capital assets, being depreciated or amortized, net	20,838,850	(695,982)	(57,525)	20,085,342
Capital assets, net	\$ 21,783,313	\$ (695,982)	\$ (57,525)	\$ 21,029,805

Depreciation and Amortization expense

	Amount
Defined Benefit Pension Plan Depreciation and Amortization	\$ 3,129,726
Oregon Public Service Retirement Plan	
Individual Account Program Depreciation and Amortization	22,232
Total Depreciation and Amortization expense	\$ 3,151,958

Leases Payable

The lease liability activity for the period ended June 30, 2022, is as follows:

	June 30, 2021	Addition	Reduction	June 30, 2022
Building Lease	\$ -	\$ 688,626	\$ (286,588)	\$ 402,038
Equipment Lease	-	122,703	(36,530)	86,173
Totals	\$ -	\$ 811,329	\$ (323,118)	\$ 488,211

The principal and interest payments on the lease liability as of June 30, 2022, are as follows:

Year	Equipment Leases			Building Lease		
	Principal	Interest	Total	Principal	Interest	Total
2023	\$ 49,793	\$ 2,089	\$ 51,882	\$ 329,414	\$ 7,268	\$ 336,682
2024	22,834	754	23,588	72,624	390	73,014
2025	8,033	346	8,379	-	-	-
2026	5,513	73	5,586	-	-	-
	\$ 86,173	\$ 3,262	\$ 89,435	\$ 402,038	\$ 7,658	\$ 409,696

Note 6 - Reserves and Designations

In accordance with the following plan requirements, various funds have been established to account for reserves or designations held for future and current payments.

Chapter 238 Defined Benefit Plan

Table 22 on the next page details the amounts comprising the total Net Position Restricted for Pension Benefits.

A. Member Reserve

The Member Reserve represents member contributions made through December 31, 2003, and earnings allocations less refunds and amounts transferred to reserves for retirements and disabilities.

B. Employer Contribution Designation

The Employer Contribution Designation represents employer contributions and earnings allocations less amounts transferred to reserves for retirements and disabilities. Employer side accounts consist of lump sum payments deposited into the Oregon Public Employees Retirement Fund, less amounts amortized as credits to employer contributions, plus investment earnings allocated in accordance with OAR 459-007-0530. Final earnings crediting is done annually on a calendar year basis. PERS estimates that the approximate value of employer side accounts was \$6,600.3 million as of June 30, 2022. Side account balances are included in the Employer Contribution Designation reserve.

C. Benefit Reserve

The Benefit Reserve is the amount set aside to pay future benefits. It includes funds transferred from the individual member and employer accounts and earnings allocations less amounts paid for retirements and disabilities.

D. Tier One Rate Guarantee Reserve

The Tier One Rate Guarantee Reserve may be credited with investment earnings in excess of the required Tier One assumed earnings rate guarantee. ORS 238.255(1) requires regular accounts for Tier One members to be credited at the assumed rate of return on investments adopted by the Board for use in actuarial valuations.

The regular account for Tier One members and alternate payees of those members cannot be credited with earnings in excess of the assumed interest rate until: (a) the reserve is fully funded with amounts determined by the Board, after consultation with the actuary employed by the Board, that are necessary to ensure a zero balance in the reserve when all Tier One members and alternate payees of those members have retired; and

(b) the reserve has been fully funded as described in (a) of this subsection in each of the three immediately preceding calendar years.

E. Contingency Reserve

The Contingency Reserve is to be maintained and used by the Board to prevent any deficit of moneys available for the payment of retirement allowances caused by interest fluctuations, changes in mortality rates, or other unforeseen contingencies.

F. Employer Contingency Reserve

The Employer Contingency Reserve was established by the Board to prevent any deficit in the fund caused by insolvency of an employer. Earnings on employer contributions fund this reserve.

G. Unallocated Earnings Designation

The Unallocated Earnings Designation represents January through June investment earnings or losses less administrative expenses, which will be credited on a calendar year basis. Crediting takes place in March of the following year after employer annual reports have been reconciled and contributions have been posted to individual member and employer accounts.

H. OPSRP Defined Benefit Program

OPSRP Defined Benefit Program reserve represents the program's accumulation of employer contributions and investment earnings less benefits and administrative expenses.

I. Employee Pension Stability Account Reserves

EPSA reserves represent the program's accumulation of redirected member IAP contributions and investment earnings less benefits and administrative expenses, amounts withdrawn by eligible members prior to retirement, amounts transferred to the Employer Contribution Designation for Tier One and Tier Two member retirements, and amounts transferred to the OPSRP Defined Benefit program for OPSRP member retirements.

Other Postemployment Benefits Plans

J. Retirement Health Insurance Account (RHIA)

The RHIA plan fiduciary net position balance represents the program's accumulation of employer contributions and investment earnings less premium subsidies and administrative expenses. As of June 30, 2022, the balance of this account was \$730.7 million. The Internal Revenue Code limits employer contributions to a 401(h) account to a maximum of 25% of the employer's normal cost contributions to the pension plan.

K. Retiree Health Insurance Premium Account (RHIPA)

The RHIPA plan fiduciary net position balance represents the program's accumulation of employer contributions and investment earnings less premium subsidies and administrative expenses. As of June 30, 2022, the balance of this account was \$83.3 million. The Internal Revenue Code limits employer contributions to a 401(h) account to a maximum of 25% of the employer's normal cost contributions to the pension plan.

Other Plans**L. Individual Account Program (IAP)**

The IAP fiduciary net position balance represents member contributions and investment earnings less benefits paid and administrative expenses. As of June 30, 2022, the balance of this account was \$12,445.7 million. Member contributions are described in Note 2.D.a. (page 48). The Oregon Legislature created the IAP in 2003 to provide an individual account-based defined contribution retirement benefit for new workers hired on or after August 29, 2003, and for Tier One/Tier Two members active on and after January 1, 2004.

M. Deferred Compensation Plan

The Deferred Compensation plan fiduciary net position balance represents the program's accumulation of plan member contributions and investment earnings less benefits paid and administrative expenses. As of June 30, 2022, the balance of this account was \$2,505.7 million. The

Internal Revenue Code (IRC) limits plan member contributions to an IRC 457 account to a maximum of \$19,500 (calendar year 2021), with optional catch-up provisions available to members over age 50.

Enterprise Fund**N. Standard Retiree Health Insurance Account (SRHIA)**

The SRHIA net position balance represents the program's accumulation of retiree insurance premiums, reinsurance reimbursements, and interest earnings less insurance claims and administrative expenses. As of June 30, 2022, the balance of this account was \$93.5 million.

Note 7 - Litigation

PERS is a defendant in various lawsuits. Although the outcomes of these lawsuits are not presently determinable, in the opinion of the System's legal counsel, the resolution of these matters will not have a material adverse effect on the financial condition of the System.

Note 8 - Standard Retiree Health Insurance Account (SRHIA)**A. Basis for Estimated Liabilities**

The SRHIA establishes claim liabilities based on estimates of the ultimate costs of claims (including future claim adjustment expenses) that have been reported but not settled and of claims that have been incurred but not reported (IBNR). Table 23 on page 69 shows the changes in the aggregated estimated claims liabilities for the fiscal years ended June 30, 2022 and 2021.

TABLE 22

Reserves and Designations as of June 30, 2022	Defined Benefit Pension Plan
Chapter 238 Defined Benefit Plan and Employee Benefit Plan	
Member Reserve	\$ 1,480,159,491
Employer Contribution Designation	21,300,213,436
Benefit Reserve	28,252,902,800
Tier One Rate Guarantee Reserve	448,759,505
Contingency Reserve	47,500,000
Employer Contingency Reserve	2,500,000
Unallocated Earnings Designation	21,507,849,368
OPSRP Defined Benefit Program	10,397,661,138
Employee Pension Stability Account Reserves	332,007,116
Net Position Restricted for Pension Benefits	<u>\$ 83,769,552,854</u>

The estimated claims liability was calculated by Butler Partners & Associates, PERS' health insurance consultant, at June 30, 2022, using a variety of mathematical and statistical techniques and adjusted for actual experience to produce current estimates that reflect recent settlements, claim frequency, and other economic and social factors. Adjustments to claims liabilities are charged or credited to expense in the periods in which they are made. The estimated claims liability of \$848,000 is carried at its face amount, and no interest discount is assumed. The IBNR represents an estimate for claims that have been incurred prior to June 30, 2022, but have not been reported to the SRHIA.

Note 9 - Employers' Net Pension Liability

A. Actuarial Cost Method and Assumptions

The components of the net pension liability of the defined benefit pension plan are shown in Table 24 on page 71. The actuarial valuation calculations are based on the benefits provided under the terms of the plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members. The December 31, 2020, system-wide Actuarial Valuation was used to develop the GASB 67 financial reporting results for the Defined Benefit Pension Plan as of June 30, 2022, using standard roll-forward procedures. Key actuarial methods and assumptions used to measure the total

pension liability are illustrated in Table 25 on page 71.

B. Discount Rate

The discount rate used to measure the total pension liability was 6.9% for the Defined Benefit Pension Plan, a reduction approved by the Board from 7.2% in the prior fiscal year. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments for the Defined Benefit Pension Plan was applied to all periods of projected benefit payments to determine the total pension liability.

C. Sensitivity Analysis

Table 26 on page 71 presents the net pension liability calculated using the discount rate of 6.9%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1% lower (5.9%) or 1% higher (7.9%) than the current rate. The results of actuarial valuations used for rate setting and the related Schedules of Funding Progress may be found in the Actuarial Section beginning on page 136.

TABLE 23

<u>Changes in the Aggregated Estimated Claims Liabilities of SRHIA</u>		
<u>For the Fiscal Year Ended June 30.</u>		
	<u>2022</u>	<u>2021</u>
Total Estimated Claims at Beginning of Fiscal Year	\$ 830,000	\$ 630,000
<u>Insured Claims and Claim Adjustment Expenses</u>		
Provision for Insured Events of Current Fiscal Year	30,271,731	19,407,489
Increase in Provision for Insured Events of Prior Years	<u>781,678</u>	<u>6,535,577</u>
Total Incurred Claims and Claim Adjustment Expenses	<u>31,053,409</u>	<u>25,943,066</u>
<u>Payments</u>		
Claims and Claim Adjustment Expenses Attributable to Insured Events of Current Fiscal Year	30,253,731	19,197,920
Claims and Claim Adjustment Expenses Attributable to Insured Events of Prior Fiscal Year	<u>781,678</u>	<u>6,545,146</u>
Total Payments	<u>31,035,409</u>	<u>25,743,066</u>
Total Estimated Claims at End of Fiscal Year	<u>\$ 848,000</u>	<u>\$ 830,000</u>

D. Long-Term Expected Rate of Return

To develop an analytical basis for the selection of the long-term expected rate of return assumption, in June 2021 the PERS Board reviewed long-term assumptions developed by both Milliman's capital market assumptions team and the Oregon Investment Council's (OIC) investment advisors. Table 31 on page 74 shows Milliman's assumptions for each of the asset classes in which the plan was invested at that time based on the OIC long-term target asset allocation. The OIC's description of each asset class was used to map the target allocation to the asset classes shown in Table 31 on page 74. Each asset class assumption is based on a consistent set of underlying assumptions and includes adjustment for the inflation assumption. These assumptions are not based on historical returns, but instead are based on a forward-looking capital market economic model.

E. Depletion Date Projection

GASB 67 generally requires that a blended discount rate be used to measure the Total Pension Liability (the Actuarial Accrued Liability calculated using the Individual Entry Age Normal Cost Method). The long-term expected return on plan investments may be used to discount liabilities to the extent that the plan's Fiduciary Net Position (fair value of investment assets, all others at cost) is projected to cover benefit payments and administrative expenses. A 20-year high-quality (AA/Aa or higher) municipal bond rate must be used for periods when the Fiduciary Net Position is not projected to cover benefit payments and administrative expenses. Determining the discount rate under GASB 67 will often require that the actuary perform complex projections of future benefit payments and asset values. GASB 67 (paragraph 43) does allow for alternative evaluations of projected solvency, if such evaluation can reliably be made. GASB does not contemplate a specific method for making an alternative evaluation of sufficiency; it is left to professional judgment.

The following circumstances justify an alternative evaluation of sufficiency for Oregon PERS:

- PERS has a formal written policy to calculate an Actuarially Determined Contribution (ADC), which is articulated in the actuarial valuation report.
- The ADC is based on a closed, layered amortization period, which means that payment of the full ADC each year will bring the plan to a 100% funded position by the end of the amortization period if future experience follows assumption.
- GASB 67 specifies that the projections regarding future solvency assume that plan

assets earn the assumed rate of return and there are no future changes in the plan provisions or actuarial methods and assumptions, which means that the projections would not reflect any adverse future experience that might impact the plan's funded position.

Based on these circumstances, it is our third-party actuary's opinion that the detailed depletion date projections outlined in GASB 67 would clearly indicate that the Fiduciary Net Position is always projected to be sufficient to cover benefit payments and administrative expenses.

Note 10 - Employers' Net OPEB (Asset)

A. Actuarial Cost Method and Assumptions

The components of the net OPEB (asset) for the OPEB plans are shown in Table 27 on page 73. The actuarial valuation calculations are based on the benefits provided under the terms of the plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members as of the December 31, 2020, valuation rolled forward to June 30, 2022. Key actuarial methods and assumptions used to measure the total OPEB liability are illustrated in Table 28 on page 73.

B. Discount Rate

The discount rate used to measure the total OPEB liability was 6.9% for the OPEB plans, a reduction approved by the Board from 7.2% in the prior fiscal year. The projection of cash flows used to determine the discount rate assumed that contributions from contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the OPEB plans' fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments for the OPEB plans was applied to all periods of projected benefit payments to determine the total OPEB liability.

C. Sensitivity Analysis

Table 29 on page 73 presents the net OPEB (asset) calculated using the discount rate of 6.9%, as well as what the net OPEB (asset) would be if it were calculated using a discount rate that is 1% lower (5.9%) or 1% higher (7.9%) than the current rate. The results of actuarial valuations used for rate setting and the related Schedules of Funding Progress may be found in the Actuarial Section on page 139.

Table 30 on page 74 presents the net OPEB (asset) calculated using the current healthcare cost trend rates, as well as what the net OPEB (asset) would be if it were calculated using healthcare

TABLE 24

<u>Net Pension Liability (in Millions)</u>	
<u>As of June 30,</u>	
	<u>2022</u>
Total Pension Liability	\$ 99,081.6
Plan Fiduciary Net Position	<u>83,769.6</u>
Employers' Net Pension Liability	\$ <u>15,312.0</u>
Plan net position as a percentage of total pension liability	84.5 %

TABLE 25

<u>Actuarial Methods and Assumptions</u>	
	<u>Pension</u>
Valuation date	December 31, 2020
Measurement date	June 30, 2022
Experience Study	2020, published July 20, 2021
Actuarial assumptions:	
Actuarial cost method	Entry Age Normal
Inflation rate	2.40 percent
Long-term expected rate of return	6.90 percent
Discount rate	6.90 percent
Projected salary increases	3.40 percent
Cost-of-living adjustments (COLA)	Blend of 2.00% COLA and graded COLA (1.25%/0.15%) in accordance with <i>Moro</i> decision; blend based on service.
Mortality	<p>Healthy retirees and beneficiaries: Pub-2010 Healthy Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p> <p>Active members: Pub-2010 Employee, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p> <p>Disabled retirees: Pub-2010 Disabled Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p>

TABLE 26

<u>Sensitivity of Net Pension Liability to Changes in the Discount Rate (in Millions)</u>				
<u>As of June 30, 2022</u>				
	1% Decrease (5.90 %)	Current Discount Rate (6.90%)	1% Increase (7.90 %)	
Employers' Net Pension Liability				
Defined Benefit Pension Plan	\$ 27,154.5	\$ 15,312.0	\$ 5,400.4	

trend rates that are 1% lower or 1% higher than the current rates. Healthcare trend cost rates are applicable to RHIPA only because of the variable nature of benefits.

D. Long-Term Expected Rate of Return

To develop an analytical basis for the selection of the long-term expected rate of return assumption, in June 2021 the PERS Board reviewed long-term assumptions developed by both Milliman's Capital Market Assumptions Team and the Oregon Investment Council's (OIC) investment advisors. Table 31 on page 74 shows Milliman's assumptions for each of the asset classes in which the plans were invested at that time based on the OIC long-term target asset allocation. The OIC's description of each asset class was used to map the target allocation to the asset classes shown on page 74. Each asset class assumption is based on a consistent set of underlying assumptions and includes adjustment for the inflation assumption. These assumptions are not based on historical returns but instead are based on a forward-looking capital market economic model.

E. Depletion Date Projection

GASB 74 generally requires that a blended discount rate be used to measure the Total OPEB Liability (the Actuarial Accrued Liability calculated using the Individual Entry Age Normal Cost Method). The long-term expected return on plan investments may be used to discount liabilities to the extent that the plan's Fiduciary Net Position (fair value of investment assets) is projected to cover benefit payments and administrative expenses. A 20-year high-quality (AA/Aa or higher) municipal bond rate must be used for periods when the Fiduciary Net Position is not projected to cover benefit payments and administrative expenses. Determining the discount rate under GASB 74 will often require that the actuary perform complex projections of future benefit payments and asset values. GASB 74 (paragraph 51) does allow for alternative evaluations of projected solvency, if such evaluation can reliably be made. GASB does not contemplate a specific method for making an alternative evaluation of sufficiency; it is left to professional judgment.

The following circumstances justify an alternative evaluation of sufficiency for Oregon PERS:

- PERS has a formal written policy to calculate an Actuarially Determined Contribution (ADC), which is articulated in the actuarial valuation report.
- The ADC is based on a closed, layered amortization period, which means that payment of the full ADC each year will bring the plan to a 100% funded position by the end of the amortization period if future experience follows assumption.

- GASB 74 specifies that the projections regarding future solvency assume that plan assets earn the assumed rate of return and there are no future changes in the plan provisions or actuarial methods and assumptions, which means that the projections would not reflect any adverse future experience that might impact the plan's funded position.

Based on these circumstances, it is our third-party actuary's opinion that the detailed depletion date projections outlined in GASB 74 would clearly indicate that the Fiduciary Net Position is always projected to be sufficient to cover benefit payments and administrative expenses.

Note 11—Subsequent Events

During July and August 2022, 18 employers made \$93.2 million in a lump-sum deposits to new side accounts with PERS.

Note 12- Effect of Future Pronouncements

The future GASB pronouncements that may have an impact to PERS financial statements are as follows:

- GASB 96, Subscription Based Information Technology Arrangements (SBITA)—provides guidance on the accounting and financial reporting for SBITAs for government end users.
- GASB 99, Omnibus 2022—to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature.
- GASB 100, Accounting Changes and Error Corrections -an amendment of GASB 62—related to restating prior period balances.
- GASB 101, Compensated Absences - updates the recognition and measurement guidance for compensated absences.

Notes to the Financial Statements

TABLE 27

<u>Net OPEB - RHIA (Asset) (in Millions)</u>		<u>Net OPEB - RHIPA (Asset) (in Millions)</u>	
<u>As of June 30, 2022</u>		<u>As of June 30, 2022</u>	
	<u>2022</u>		<u>2022</u>
Total OPEB - RHIA Liability	\$ 375.4	Total OPEB - RHIPA Liability	\$ 49.1
Plan Fiduciary Net Position	730.7	Plan Fiduciary Net Position	83.3
Employers' Net OPEB - RHIA (Asset)	\$ (355.3)	Employer's Net OPEB - RHIPA (Asset)	\$ (34.2)
Plan net position as a percentage of Total OPEB - RHIA Liability	194.6 %	Plan net position as a percentage of Total OPEB - RHIPA Liability	169.7 %

TABLE 28

<u>Actuarial Methods and Assumptions</u>			
	<u>RHIA</u>	<u>RHIPA</u>	
Valuation date	December 31, 2020	December 31, 2020	
Measurement date	June 30, 2022	June 30, 2022	
Experience Study	2020, published July 20, 2021	2020, published July 20, 2021	
Actuarial assumptions:			
Actuarial cost method	Entry Age Normal	Entry Age Normal	
Inflation rate	2.40 percent	2.40 percent	
Long-term expected rate of return	6.90 percent	6.90 percent	
Discount rate	6.90 percent	6.90 percent	
Projected salary increases	3.40 percent	3.40 percent	
Retiree healthcare participation	Healthy retirees: 27.5% Disabled retirees: 15%	8-14 Years of Service: 10.0% 15-19 Years of Service: 11.0% 20-24 Years of Service: 14.0% 25-29 Years of Service: 22.0% 30+ Years of Service: 27.0%	
Healthcare cost trend rate	Not applicable	Applied at beginning of plan year, starting with 5.9% for 2021, decreasing to 4.7% for 2028, increasing to 4.8% for 2037, and decreasing to an ultimate rate of 3.9% for 2074 and beyond.	
Mortality	<p>Healthy retirees and beneficiaries: Pub-2010 Healthy Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p> <p>Active members: Pub-2010 Employee, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p> <p>Disabled retirees: Pub-2010 Disabled Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p>	<p>Healthy retirees and beneficiaries: Pub-2010 Healthy Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p> <p>Active members: Pub-2010 Employee, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p> <p>Disabled retirees: Pub-2010 Disabled Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p>	

TABLE 29

<u>Sensitivity of Net OPEB (Asset) to Changes in the Discount Rate (in Millions)</u>			
<u>As of June 30, 2022</u>			
	1% Decrease	Current	1% Increase
Employers' Net OPEB (Asset)	(5.90 %)	Discount	(7.90 %)
	Rate (6.90%)		
Other Postemployment Benefit Plan - RHIA	\$ (320.3)	\$ (355.3)	\$ (385.4)
Other Postemployment Benefit Plan - RHIPA	\$ (31.4)	\$ (34.2)	\$ (36.9)

TABLE 30

Sensitivity of Net OPEB (Asset) to Changes in the Healthcare Cost Trend Rate (in Millions)**As of June 30, 2021**

Employers' Net OPEB (Asset)	1% Decrease	Current Trend Rate	1% Increase
Other Postemployment Benefit Plan - RHIA	\$ (355.3)	\$ (355.3)	\$ (355.3)
Other Postemployment Benefit Plan - RHIPA	(38.1)	(34.2)	(29.9)

TABLE 31

Long-Term Expected Rate of Return¹

Asset Class	Target Allocation	Annual Arithmetic Return ²	20-Year Annualized Geometric Mean	Annual Standard Deviation
Global Equity	30.62 %	7.11 %	5.85 %	17.05 %
Private Equity	25.50	11.35	7.71	30.00
Core Fixed Income	23.75	2.80	2.73	3.85
Real Estate	12.25	6.29	5.66	12.00
Master Limited Partnerships	0.75	7.65	5.71	21.30
Infrastructure	1.50	7.24	6.26	15.00
Commodities	0.63	4.68	3.10	18.85
Hedge Fund of Funds - Multistrategy	1.25	5.42	5.11	8.45
Hedge Fund Equity - Hedge	0.63	5.85	5.31	11.05
Hedge Fund - Macro	5.62	5.33	5.06	7.90
US Cash	-2.50 ³	1.77	1.76	1.20
Assumed Inflation - Mean			2.40 %	1.65 %

¹ Based on the OIC Statement of Investment Objectives and Policy Framework for the Oregon Public Employees Retirement Fund, including revisions adopted at the OIC meeting on June 2, 2021.

² The arithmetic mean is a component that goes into calculating the geometric mean. Expected rates of return are presented using the geometric mean, which the Board uses in setting the discount rate.

³ Negative allocation to cash represents levered exposure from allocation to Risk Parity strategy.

OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM



Required Supplementary Information
Schedule of Changes in Net Pension Liability/(Asset) and Related Ratios (Unaudited)
Defined Benefit Pension Plan
For the Fiscal Year Ended June 30,¹
(amounts in millions)

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability²									
Service Cost	\$ 1,387.7	\$ 1,263.5	\$ 1,187.2	\$ 1,146.4	\$ 1,108.2	\$ 1,105.5	\$ 1,016.8	\$ 960.9	\$ 1,020.3
Interest on Total Pension Liability	6,505.6	6,349.3	6,162.9	5,952.1	5,858.2	5,662.2	5,355.3	4,779.5	4,819.4
Effect of Plan Changes ³	-	148.5	-	(50.6)	-	-	-	-	-
Changes in Benefit Terms	-	-	-	-	-	-	-	5,353.5	(2,423.6)
Changes in Assumptions	490.3	3,041.9	(50.5)	-	2,240.3	-	3,946.4	-	-
Differences Between Expected and Actual Experience	(116.7)	600.9	406.7	804.2	74.3	351.8	317.3	380.0	-
Benefit Payments, including refunds of contributions	(5,483.1)	(5,249.0)	(5,064.8)	(4,827.0)	(4,656.6)	(4,362.2)	(4,206.5)	(3,943.6)	(3,863.4)
Net Change in Total Pension Liability	2,783.8	6,155.1	2,641.5	3,025.1	4,624.4	2,757.3	6,429.3	7,530.3	(447.3)
Total Pension Liability - Beginning	96,297.8	90,142.7	87,501.2	84,476.1	79,851.7	77,094.4	70,665.1	63,134.8	63,582.1
Total Pension Liability - Ending	<u>\$ 99,081.6</u>	<u>\$ 96,297.8</u>	<u>\$ 90,142.7</u>	<u>\$ 87,501.2</u>	<u>\$ 84,476.1</u>	<u>\$ 79,851.7</u>	<u>\$ 77,094.4</u>	<u>\$ 70,665.1</u>	<u>\$ 63,134.8</u>
Plan Fiduciary Net Position									
Employer Contributions	\$ 4,030.2	\$ 2,161.5	\$ 2,299.0	\$ 1,720.2	\$ 1,390.1	\$ 1,022.2	\$ 977.3	\$ 1,123.3	\$ 915.2
Member Contributions	160.1	160.3	10.2	11.4	12.6	13.1	14.2	13.8	15.3
Net Investment and Other Income	789.8	18,998.4	923.3	4,010.0	6,247.5	7,660.0	413.9	2,364.5	9,886.6
Benefit Payments	(5,468.2)	(5,237.2)	(5,064.8)	(4,815.1)	(4,642.7)	(4,346.2)	(4,193.3)	(3,927.2)	(3,837.8)
Refunds of Contributions	(14.9)	(11.9)	-	(11.9)	(13.9)	(16.0)	(13.1)	(16.5)	(25.6)
Administrative Expense	(58.7)	(59.1)	(52.1)	(38.4)	(37.8)	(43.5)	(40.5)	(35.7)	(31.2)
Net Change in Plan Fiduciary Net Position	(561.7)	16,012.0	(1,884.4)	876.2	2,955.8	4,289.6	(2,841.5)	(477.8)	6,922.5
Plan Fiduciary Net Position - Beginning	84,331.3	68,319.3	70,203.7	69,327.5	66,371.7	62,082.1	64,923.6	65,401.4	58,478.9
Plan Fiduciary Net Position - Ending	<u>\$ 83,769.6</u>	<u>\$ 84,331.3</u>	<u>\$ 68,319.3</u>	<u>\$ 70,203.7</u>	<u>\$ 69,327.5</u>	<u>\$ 66,371.7</u>	<u>\$ 62,082.1</u>	<u>\$ 64,923.6</u>	<u>\$ 65,401.4</u>
Net Pension Liability/(Asset)	<u>\$ 15,312.0</u>	<u>\$ 11,966.5</u>	<u>\$ 21,823.4</u>	<u>\$ 17,297.5</u>	<u>\$ 15,148.6</u>	<u>\$ 13,480.0</u>	<u>\$ 15,012.3</u>	<u>\$ 5,741.5</u>	<u>\$ (2,266.6)</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	84.5 %	87.6 %	75.8 %	80.2 %	82.1 %	83.1 %	80.5 %	91.9 %	103.6 %
Covered Payroll	\$ 12,942.6	\$ 12,235.5	\$ 11,574.8	\$ 10,716.7	\$ 10,044.0	\$ 10,037.5	\$ 9,428.4	\$ 9,000.2	\$ 8,701.7
Net Pension Liability/(Asset) as a Percentage of Covered Payroll	118.31 %	97.8 %	188.5 %	161.4 %	150.8 %	134.3 %	159.2 %	63.8 %	(26.0) %

¹ 10-year trend information will be disclosed prospectively

² See Table 25 for Actuarial Methods and Assumptions

³ Senate Bill 1049, signed into law in June 2019, introduced a limit on the amount of annual salary included for the calculation of benefits. Beginning in 2020, annual salary in excess of \$195,000 (as indexed in future years) will be excluded when determining member benefits. As a result, future benefits for certain active members are now projected to be lower than prior to the legislation. Senate Bill 111, enacted in June 2021, provides an increased pre-retirement death benefit for members who die on or after their early retirement age.

Changes in Benefit Terms and Assumptions:

Benefit Terms: The 2013 Oregon Legislature made a series of changes to PERS that lowered projected future benefit payments from the System. These changes included reductions to future Cost of Living Adjustments (COLA) made through Senate Bills 822 and 861. Senate Bill 822 also required the contribution rates scheduled to be in effect from July 2013 to June 2015 to be reduced. The Oregon Supreme Court decision in *Moro v. State of Oregon*, issued on April 30, 2015, reversed a significant portion of the reductions the 2013 Oregon Legislature made to future System Cost of Living Adjustments (COLA) through Senate Bills 822 and 861. This reversal increased the total pension liability as of June 30, 2015 compared to June 30, 2014 total pension liability.

Assumptions: The PERS Board adopted assumption changes that were used to measure the June 30, 2016 total pension liability and June 30, 2018 total pension liability. For June 30, 2016, the changes included the lowering of the long-term expected rate of return to 7.50 percent and lowering of the assumed inflation to 2.50 percent. For June 30, 2018, the long-term expected rate of return was lowered to 7.20 percent. For June 30, 2021, the long-term expected rate of return was lowered to 6.90 percent, and the inflation rate was lowered from 2.5 to 2.4 percent. In addition, the healthy mortality assumption was changed to reflect an updated mortality improvement scale for all groups, and assumptions were updated for merit increases, unused sick leave, and vacation pay were updated.

Required Supplementary Information
Schedule of Investment Returns (Unaudited)
Defined Benefit Pension Plan
For the Fiscal Year Ended June 30¹

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual Money-Weighted Rate of Return Net of Investment Expense	6.2%	26.2%	0.5%	6.4%	9.7%	11.8%	1.6%	3.7%	17.2%

¹ 10-year trend information will be disclosed prospectively.

Required Supplementary Information

Required Supplementary Information

Schedule of Defined Benefit Pension Plan Employer Contributions³ (Unaudited)

Last 10 Fiscal Years

(Dollar amounts in thousands)

	2022	2021	2020	2019	2018
Actuarially determined contributions ¹	\$ 2,117,323	\$ 2,058,483	\$ 1,981,943	\$ 1,410,966	\$ 1,318,672
Contributions in relation to the actuarially determined contributions ²	2,117,323	2,058,483	1,981,943	1,410,966	1,318,672
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered payroll	\$ 12,942,642	\$ 12,235,510	\$ 11,574,796	\$ 10,716,707	\$ 10,044,005
Contributions as a percentage of covered payroll	16.36%	16.82%	17.12%	13.17%	13.13%

Notes:

¹ The actuarially determined contributions on this Schedule of Defined Benefit Pension Plan Contributions have been adjusted to remove contribution requirements related to employer-specific liabilities.

² Employer contributions on the Statement of Changes in Fiduciary Net Position include interest related to employer-specific liabilities and employers' optional supplemental contributions.

³ For Actuarial Assumptions and Methods, see table below.

Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions

Actuarial Valuation:	December 31, 2019	December 31, 2017	December 31, 2015
Effective:	July 2021 - June 2023	July 2019 - June 2021	July 2017 - June 2019
Actuarial cost method:	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll	Level percentage of payroll	Level percentage of payroll
Asset valuation method:	Fair value	Fair value	Fair value
Remaining amortization periods:	20 years	20 years	20 years
Actuarial assumptions:			
Inflation rate	2.40 percent	2.50 percent	2.50 percent
Projected salary increases	3.40 percent	3.50 percent	3.50 percent
Investment rate of return	6.90 percent	7.20 percent	7.50 percent

Continued on next page

2017	2016	2015	2014	2013
\$ 960,254	\$ 941,321	\$ 909,912	\$ 866,635	\$ 781,015
960,254	941,321	909,912	866,635	781,015
\$ -	\$ -	\$ -	\$ -	\$ -
\$ 10,037,542	\$ 9,428,447	\$ 9,000,246	\$ 8,701,657	\$ 8,280,731
9.57%	9.98%	10.11%	9.96%	9.43%

December 31, 2013	December 31, 2011	December 31, 2009
July 2015 - June 2017	July 2013 - June 2015	July 2011 - June 2013
Entry Age Normal	Projected Unit Credit	Projected Unit Credit
Level percentage of payroll	Level percentage of payroll	Level percentage of payroll
Fair value	Fair value	Fair value
20 years	N/A	N/A
2.75 percent	2.75 percent	2.75 percent
3.75 percent	3.75 percent	3.75 percent
7.75 percent	8.00 percent	8.00 percent

Continued from previous page

Required Supplementary Information

Required Supplementary Information Schedule of Changes in Net OPEB (Asset) and Related Ratios (Unaudited) Other Postemployment Benefit Plan - RHIA For the Fiscal Year Ended June 30,¹ (amounts in millions)

	2022	2021	2020	2019	2018	2017
Total OPEB Liability²						
Service Cost	\$ 1.9	\$ 2.0	\$ 2.3	\$ 2.5	\$ 3.1	\$ 3.4
Interest on Total OPEB Liability	27.3	28.3	30.3	32.4	34.2	33.8
Changes in Benefit Terms	-	-	-	-	-	-
Changes in Assumptions	(19.7)	10.7	(16.5)	-	(0.5)	-
Differences Between Expected and Actual Experience	(13.0)	(7.1)	(13.0)	(32.3)	(9.1)	-
Benefit Payments	(30.6)	(31.3)	(31.8)	(32.2)	(32.5)	(31.2)
Net Change in Total OPEB Liability	(34.1)	2.6	(28.7)	(29.6)	(4.8)	6.0
Total OPEB Liability - Beginning	409.5	406.9	435.6	465.2	470.0	464.0
Total OPEB Liability - Ending	\$ 375.4	\$ 409.5	\$ 406.9	\$ 435.6	\$ 465.2	\$ 470.0
Plan Fiduciary Net Position						
Employer Contributions	\$ 2.5	\$ 3.0	\$ 6.3	\$ 49.6	\$ 48.0	\$ 49.8
Net Investment and Other Income	7.5	171.8	8.6	36.0	50.9	57.6
Benefit Payments	(30.6)	(31.3)	(31.8)	(32.2)	(32.6)	(31.2)
Administrative Expense	(1.6)	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)
Net Change in Plan Fiduciary Net Position	(22.2)	142.2	(18.2)	52.1	65.0	74.9
Plan Fiduciary Net Position - Beginning	752.9	610.7	628.9	576.8	511.8	436.9
Plan Fiduciary Net Position - Ending	\$ 730.7	\$ 752.9	\$ 610.7	\$ 628.9	\$ 576.8	\$ 511.8
Net OPEB (Asset)	\$ (355.3)	\$ (343.4)	\$ (203.8)	\$ (193.3)	\$ (111.6)	\$ (41.8)
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	194.6	183.9	150.1	144.4 %	124.0 %	108.9 %
Covered Payroll	\$ 3,792.8	\$ 3,929.8	\$ 3,955.6	\$ 4,023.3	\$ 4,303.2	\$ 4,570.1
Net OPEB (Asset) as a Percentage of Covered Payroll	(9.37) %	(8.74) %	(5.15) %	(4.80) %	(2.59) %	(0.91) %

¹ 10-year trend information will be disclosed prospectively

² See Table 28 for Actuarial Methods and Assumptions

Changes in Benefit Terms and Assumptions:

Assumptions: The PERS Board adopted assumption changes that were used to measure the June 30, 2021 total OPEB liability. The changes include the lowering of the long-term expected rate of return from 7.20 to 6.90 percent and the inflation rate from 2.5 to 2.4 percent. In addition, the healthy healthcare participation and healthy mortality assumptions were changed to reflect an updated trends and mortality improvement scale for all groups.

Required Supplementary Information Schedule of Investment Returns (Unaudited) Other Postemployment Benefit Plan - RHIA For the Fiscal Year Ended June 30¹

	2022	2021	2020	2019	2018	2017
Annual Money-Weighted Rate of Return Net of Investment Expense	6.5%	26.3%	0.6%	6.7%	9.7%	12.5%

¹ 10-year trend information will be disclosed prospectively.

Required Supplementary Information
Schedule of Changes in Net OPEB Liability/(Asset) and Related Ratios (Unaudited)
Other Postemployment Benefit Plan - RHIPA
For the Fiscal Year Ended June 30,¹
(amounts in millions)

	2022	2021	2020	2019	2018	2017
Total OPEB Liability²						
Service Cost	\$ 1.2	\$ 1.3	\$ 1.4	\$ 1.5	\$ 1.5	\$ 1.5
Interest on Total OPEB Liability	4.3	4.5	5.1	5.0	5.2	5.0
Changes in Benefit Terms	-	-	-	-	-	-
Changes in Assumptions	(11.4)	1.1	(7.9)	-	0.4	-
Differences Between Expected and Actual Experience	(4.5)	(4.6)	(2.2)	(0.3)	(3.0)	-
Benefit Payments	(3.4)	(3.7)	(4.1)	(4.5)	(4.7)	(4.3)
Net Change in Total OPEB Liability	(13.8)	(1.4)	(7.7)	1.7	(0.6)	2.2
Total OPEB Liability - Beginning	62.9	64.3	72.0	70.3	70.9	68.7
Total OPEB Liability - Ending	\$ 49.1	\$ 62.9	\$ 64.3	\$ 72.0	\$ 70.3	\$ 70.9
Plan Fiduciary Net Position						
Employer Contributions	\$ 8.3	\$ 11.8	\$ 11.2	\$ 14.0	\$ 13.3	\$ 11.9
Net Investment and Other Income	0.8	16.3	0.8	2.5	2.4	2.0
Benefit Payments	(3.4)	(3.7)	(4.1)	(4.5)	(4.7)	(4.3)
Administrative Expense	(0.7)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
Net Change in Plan Fiduciary Net Position	4.9	24.1	7.6	11.7	10.7	9.3
Plan Fiduciary Net Position - Beginning	78.4	54.3	46.7	35.0	24.3	15.0
Plan Fiduciary Net Position - Ending	\$ 83.3	\$ 78.4	\$ 54.3	\$ 46.7	\$ 35.0	\$ 24.3
Net OPEB Liability/(Asset)	\$ (34.2)	\$ (15.5)	\$ 10.0	\$ 25.3	\$ 35.3	\$ 46.6
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	169.7 %	124.6 %	84.5 %	64.9 %	49.8 %	34.3 %
Covered Payroll	\$ 1,125.8	\$ 1,159.0	\$ 1,166.4	\$ 1,120.5	\$ 1,165.3	\$ 1,327.1
Net OPEB (Asset)/Liability as a Percentage of Covered Payroll	(3.04) %	(1.34) %	0.86 %	2.26 %	3.03 %	3.51 %

¹ 10-year trend information will be disclosed prospectively

² See Table 28 for Actuarial Methods and Assumptions

Changes in Benefit Terms and Assumptions:

Assumptions: The PERS Board adopted assumption changes that were used to measure the June 30, 2021 total OPEB liability. The changes include the lowering of the long-term expected rate of return from 7.20 to 6.90 percent and the inflation rate from 2.5 to 2.4 percent. In addition, the healthy healthcare participation and cost trend rates, and healthy mortality assumptions were changed to reflect an updated trends and mortality improvement scale for all groups.

Required Supplementary Information
Schedule of Investment Returns (Unaudited)
Other Postemployment Benefit Plan - RHIPA
For the Fiscal Year Ended June 30¹

	2022	2021	2020	2019	2018	2017
Annual Money-Weighted Rate of Return Net of Investment Expense	6.8%	26.6%	1.0%	7.6%	10.2%	14.3%

¹ 10-year trend information will be disclosed prospectively

Required Supplementary Information

Required Supplementary Information

Schedule of OPEB RHIA Employer Contributions¹ (Unaudited)

Last 10 Fiscal Years

(Dollar amounts in thousands)

	2022	2021	2020	2019	2018
Actuarially determined contributions ¹	\$ 2,458	\$ 2,963	\$ 6,360	\$ 49,615	\$ 47,998
Contributions in relation to the actuarially determined contributions	2,458	2,963	6,360	49,615	47,998
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered payroll	\$ 12,942,642	\$ 12,235,510	\$ 11,574,796	\$ 10,716,707	\$ 10,044,005
Contributions as a percentage of covered payroll	0.02%	0.02%	0.05%	0.46%	0.48%

Note:

¹ For Actuarial Assumptions and Methods, see table below.

Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions

Actuarial Valuation:	December 31, 2019	December 31, 2017	December 31, 2015
Effective:	July 2021 - June 2023	July 2019 - June 2021	July 2017 - June 2019
Actuarial cost method:	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
Amortization Period:	10 years	10 years	10 years
Asset valuation method:	Market value	Market value	Market value
Remaining amortization periods:	10 years	10 years	20 years
Actuarial assumptions:			
Inflation rate	2.40 percent	2.50 percent	2.50 percent
Healthcare cost trend rates	None. Statute stipulates \$60 monthly payment for healthcare insurance.	None. Statute stipulates \$60 monthly payment for healthcare insurance.	None. Statute stipulates \$60 monthly payment for healthcare insurance.
Projected salary increases	3.40 percent	3.50 percent	3.50 percent
Investment rate of return	6.90 percent	7.20 percent	7.50 percent

Continued on next page

2017	2016	2015	2014	2013
\$ 49,786	\$ 44,588	\$ 53,648	\$ 48,253	\$ 47,294
49,786	44,588	53,648	48,253	47,294
\$ -	\$ -	\$ -	\$ -	\$ -
\$ 10,037,542	\$ 9,428,447	\$ 9,000,246	\$ 8,686,772	\$ 8,686,771
0.50%	0.47%	0.60%	0.56%	0.54%

December 31, 2013	December 31, 2011	December 31, 2009
July 2015 - June 2017	July 2013 - June 2015	July 2011 - June 2013
Entry Age Normal	Projected Unit Credit	Projected Unit Credit
Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
10 years	10 years	10 years
Market value	Market value	Market value
20 years	N/A	N/A
2.75 percent	2.75 percent	2.75 percent
None. Statute stipulates \$60 monthly payment for healthcare insurance.	None. Statute stipulates \$60 monthly payment for healthcare insurance.	None. Statute stipulates \$60 monthly payment for
3.75 percent	3.75 percent	3.75 percent
7.75 percent	8.00 percent	8.00 percent

Required Supplementary Information

Required Supplementary Information

Schedule of OPEB RHIPA Employer Contributions¹ (Unaudited)

Last 10 Fiscal Years

(Dollar amounts in thousands)

	2022	2021	2020	2019	2018
Actuarially determined contributions ¹	\$ 8,265	\$ 11,724	\$ 11,242	\$ 14,009	\$ 13,290
Contributions in relation to the actuarially determined contributions	8,265	11,724	11,242	14,009	13,290
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered payroll	\$ 4,013,100	\$ 3,794,773	\$ 3,555,791	\$ 3,118,065	\$ 2,952,776
Contributions as a percentage of covered payroll	0.21%	0.31%	0.32%	0.45%	0.45%

Note:

¹ For Actuarial Assumptions and Methods, see table below.

Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions

Actuarial Valuation:	December 31, 2019	December 31, 2017	December 31, 2015
Effective:	July 2021 - June 2023	July 2019 - June 2021	July 2017 - June 2019
Actuarial cost method:	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
Amortization Period:	10 years	10 years	10 years
Asset valuation method:	Market value	Market value	Market value
Remaining amortization periods:	10 years	10 years	20 years
Actuarial assumptions:			
Inflation rate	2.40 percent	2.50 percent	2.50 percent
Healthcare cost trend rates	change to: Graded from 7.1 percent in 2019 to 4.0 percent in 2074.	Graded from 6.5 percent in 2018 to 4.2 percent in 2093.	Graded from 6.3 percent in 2016 to 4.4 percent in 2094.
Projected salary increases	3.40 percent	3.50 percent	3.50 percent
Investment rate of return	6.90 percent	7.20 percent	7.50 percent

Continued on next page

2017	2016	2015	2014	2013
\$ 11,864	\$ 10,967	\$ 6,887	\$ 6,150	\$ 3,444
11,864	10,967	6,887	6,150	3,444
\$ -	\$ -	\$ -	\$ -	\$ -
\$ 3,024,383	\$ 2,850,753	\$ 2,737,792	\$ 2,566,555	\$ 2,422,404
0.39%	0.38%	0.25%	0.24%	0.14%

December 31, 2013	December 31, 2011	December 31, 2009
July 2015 - June 2017	July 2013 - June 2015	July 2011 - June 2013
Entry Age Normal	Projected Unit Credit	Projected Unit Credit
Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
10 years	10 years	10 years
Market value	Market value	Market value
20 years	N/A	N/A
2.75 percent	2.75 percent	2.75 percent
Graded from 6.1 percent in 2014 to 4.7 percent in 2083.	Graded from 6.9 percent in 2012 to 4.5 percent in 2029	Graded from 7.0 percent in 2010 to 4.5 percent in 2029
3.75 percent	3.75 percent	3.75 percent
7.75 percent	8.00 percent	8.00 percent

Continued from previous page

Required Supplementary Information

Required Supplementary Information
 Schedule of Claims Development Information (Unaudited)
 Standard Retiree Health Insurance Account
 Fiscal and Policy Year Ended (In Millions)¹

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1. Net earned required contribution and investment revenues	\$ 195.59	\$ 198.85	\$ 226.61	\$ 197.92	\$ 157.55	\$ 176.38	\$ 111.68	\$ 32.49	\$ 31.27	\$ 28.91
2. Unallocated expenses	25.00	29.00	32.09	26.30	16.55	16.11	11.36	4.98	4.43	4.19
3. Estimated incurred claims and expense, end of policy year	172.89	175.41	212.21	179.01	133.10	142.94	83.24	18.27	25.94	31.05
4. Paid (cumulative) as of:										
End of policy year	172.76	175.01	211.90	184.61	133.60	142.44	91.57	18.50	25.74	31.04
One year later	185.22	192.78	226.61	200.50	151.25	149.18	98.32	25.05	26.53	
Two years later	185.21	192.81	226.61	200.50	151.78	156.07	98.31	25.05		
Three years later	185.20	192.81	226.61	200.49	151.75	156.05	98.31			
Four years later	185.20	192.81	226.60	200.48	151.75	156.05				
Five years later	185.20	192.81	226.60	200.48	151.75					
Six years later	185.20	192.81	226.60	200.48						
Seven years later	185.20	192.81	226.60							
Eight years later	185.20	192.81								
Nine years later	185.20									
5. Reestimated incurred claims and expense:										
End of policy year	172.89	175.41	212.21	179.01	133.10	142.94	83.24	18.27	25.94	31.05
One year later	185.35	193.18	226.92	194.90	151.25	149.68	89.98	24.81	26.73	
Two years later	185.34	193.21	226.92	194.91	151.28	156.57	89.97	24.81		
Three years later	185.33	193.21	226.91	194.90	151.25	156.55	89.97			
Four years later	185.33	193.22	226.91	194.88	151.25	156.55				
Five years later	185.33	193.21	226.90	194.88	151.25					
Six years later	185.33	193.21	226.90	194.88						
Seven years later	185.33	193.21	226.90							
Eight years later	185.33	193.21								
Nine years later	185.33									
6. Increase in estimated incurred claims and expense from end of policy year:	12.46	17.77	14.71	15.89	18.15	13.59	6.74	6.55	0.78	

OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM



Other Supplementary Information

Other Supplementary Information Schedule of Plan Net Position Defined Benefit Pension Plan As of June 30, 2022

	Regular Account	Employee Pension Stability Account PERS 238/Regular (Tier One/Tier Two)	Oregon Public Service Retirement Plan Pension Program
Assets:			
Cash and Cash Equivalents	\$ 3,491,582,180	\$ 8,659,986	\$ 506,675,359
Receivables:			
Employer	24,996,043	-	20,258,141
Interest and Dividends	120,439,411	314,670	17,148,324
Investment Sales and Other Receivables	2,531,778,509	6,570,543	358,362,897
Leases	242,030	-	-
Transitional Liability	305,741,323	-	-
Total Receivables	<u>2,983,197,316</u>	<u>6,885,213</u>	<u>395,769,362</u>
Interaccount Receivables and Payables	23,014,109	-	(7,189,102)
Due from Other Funds	5,227,982	8,017,209	(205,568)
Investments:			
Debt Securities	13,557,389,699	35,421,150	1,930,319,203
Public Equity	15,475,089,813	40,431,490	2,203,363,899
Real Estate and Real Estate Investment Trusts	10,488,853,079	27,404,039	1,493,416,872
Private Equity	19,125,138,725	49,967,908	2,723,062,725
Real Assets	5,828,770,535	15,228,725	829,908,112
Diversifying Strategies	4,038,932,223	10,552,446	575,068,550
Opportunity Portfolio	1,748,926,998	4,569,390	249,014,555
Total Investments	<u>70,263,101,072</u>	<u>183,575,148</u>	<u>10,004,153,916</u>
Securities Lending Collateral	356,302,683	929,933	50,728,974
Prepaid Expenses	9,042,545	19,171	1,044,754
Capital Assets at Cost, Net	19,615,019	-	1,259,160
Total Assets	<u>77,151,082,906</u>	<u>208,086,660</u>	<u>10,952,236,855</u>
Liabilities:			
Investment Purchases and Accrued Expenses	4,007,397,987	9,196,973	502,172,328
Deposits and Other Liabilities	31,316,176	-	1,663,505
Due to Other Funds	12,458	7,886,011	-
Leases Payable	488,211	-	-
Securities Lending Collateral Due Borrowers	356,379,306	930,133	50,739,884
Total Liabilities	<u>4,395,594,138</u>	<u>18,013,117</u>	<u>554,575,717</u>
Deferred Inflows of Resources:			
Leases	241,340	-	-
Net Position Restricted for Pension Benefits	<u>\$ 72,755,247,428</u>	<u>\$ 190,073,543</u>	<u>\$ 10,397,661,138</u>

Continued on next page

Employee Pension Stability Account OPSRP Program	Variable Account	Total
\$ 6,176,497	\$ 9,110,267	\$ 4,022,204,289
-	-	45,254,184
218,648	-	138,121,053
4,565,530	-	2,901,277,479
-	-	242,030
-	-	305,741,323
<u>4,784,178</u>	<u>-</u>	<u>3,390,636,069</u>
-	(15,825,007)	-
10,125,300	-	23,164,923
24,612,321	-	15,547,742,373
28,093,748	294,677,781	18,041,656,731
19,041,647	-	12,028,715,637
34,720,110	-	21,932,889,468
10,581,652	-	6,684,489,024
7,332,348	-	4,631,885,567
3,175,033	-	2,005,685,976
<u>127,556,859</u>	<u>294,677,781</u>	<u>80,873,064,776</u>
646,386	14,854	408,622,830
13,321	-	10,119,791
-	-	20,874,179
<u>149,302,541</u>	<u>287,977,895</u>	<u>88,748,686,857</u>
6,390,500	3,324,300	4,528,482,088
-	1,569	32,981,250
331,943	-	8,230,412
-	-	488,211
646,525	14,854	408,710,702
<u>7,368,968</u>	<u>3,340,723</u>	<u>4,978,892,663</u>
-	-	241,340
<u>\$ 141,933,573</u>	<u>\$ 284,637,172</u>	<u>\$ 83,769,552,854</u>

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Other Supplementary Information

Other Supplementary Information Schedule of Changes in Plan Net Position Defined Benefit Pension Plan For the Fiscal Year Ended June 30, 2022

	Regular Account	Employee Pension Stability Account PERS 238/Regular (Tier One/Tier Two)	Oregon Public Service Retirement Plan Pension Program
Additions:			
Contributions:			
Employer	\$ 3,026,361,217	\$ -	\$ 1,003,797,322
Plan Member	7,244,026	87,365,388	-
Total Contributions	<u>3,033,605,243</u>	<u>87,365,388</u>	<u>1,003,797,322</u>
Investment Income:			
Net Appreciation/(Decrease) in Fair Value of Investments	17,184,842	12,923,077	124,137,954
Interest, Dividends and Other Investment Income	1,699,845,391	4,629,898	243,263,404
Total Investment Income	<u>1,717,030,233</u>	<u>17,552,975</u>	<u>367,401,358</u>
Less Investment Expense	<u>(1,111,850,281)</u>	<u>(2,894,884)</u>	<u>(157,982,418)</u>
Net Investment Income	605,179,952	14,658,091	209,418,940
Securities Lending Income:			
Securities Lending Income	5,320,020	9,835	700,540
Less Securities Lending Expense	<u>(1,878,123)</u>	<u>(3,503)</u>	<u>(247,733)</u>
Net Securities Lending Income	3,441,897	6,332	452,807
Other Income	6,409,239	-	17,864
Total Additions	<u>3,648,636,331</u>	<u>102,029,811</u>	<u>1,213,686,933</u>
Deductions			
Benefits	5,348,793,355	-	78,422,522
Death Benefits	5,732,332	-	-
Refunds of Contributions	14,836,709	-	-
Administrative Expense	44,798,019	264	11,703,692
Interaccount Transfers	<u>(80,198,189)</u>	<u>16,890,129</u>	<u>(1,199,073)</u>
Total Deductions	<u>5,333,962,226</u>	<u>16,890,393</u>	<u>88,927,141</u>
Net Increase/(Decrease)	(1,685,325,895)	85,139,418	1,124,759,792
Net Position Restricted for Pension Benefits			
Beginning of Year	74,440,573,323	104,934,125	9,272,901,346
End of Year	<u>\$ 72,755,247,428</u>	<u>\$ 190,073,543</u>	<u>\$ 10,397,661,138</u>

Continued on next page

Employee Pension Stability Account OPSRP Program	Variable Account	Total
\$ -	\$ -	\$ 4,030,158,539
<u>65,326,471</u>	<u>162,019</u>	<u>160,097,904</u>
<u>65,326,471</u>	<u>162,019</u>	<u>4,190,256,443</u>
8,293,536	(59,060,266)	103,479,143
<u>3,365,240</u>	<u>30,352</u>	<u>1,951,134,285</u>
<u>11,658,776</u>	<u>(59,029,914)</u>	<u>2,054,613,428</u>
<u>(2,094,056)</u>	<u>(339,577)</u>	<u>(1,275,161,216)</u>
<u>9,564,720</u>	<u>(59,369,491)</u>	<u>779,452,212</u>
6,688	10	6,037,093
<u>(2,383)</u>	<u>(10)</u>	<u>(2,131,752)</u>
<u>4,305</u>	<u>-</u>	<u>3,905,341</u>
-	-	6,427,103
<u>74,895,496</u>	<u>(59,207,472)</u>	<u>4,980,041,099</u>
-	35,266,900	5,462,482,777
-	-	5,732,332
-	56,496	14,893,205
264	2,194,129	58,696,368
<u>1,199,073</u>	<u>63,308,060</u>	<u>-</u>
<u>1,199,337</u>	<u>100,825,585</u>	<u>5,541,804,682</u>
73,696,159	(160,033,057)	(561,763,583)
<u>68,237,414</u>	<u>444,670,229</u>	<u>84,331,316,437</u>
<u>\$ 141,933,573</u>	<u>\$ 284,637,172</u>	<u>\$ 83,769,552,854</u>

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Other Supplementary Information

Other Supplementary Information Schedule of Administrative Expenses - All Funds For the Fiscal Year Ended June 30, 2022

Personal Services:

Staff Salaries	\$ 29,589,972
Social Security	6,774,734
Retirement	2,155,246
Unemployment compensation	30,916
Worker Compensation	8,123
Insurance	6,803,649
Assessments	182,673
Total Personal Services	<u>45,545,313</u>

Professional Services:

Actuarial	418,912
Data Processing	32,697
Legal Counsel	274,579
Medical Consultants	1,286,686
Training and Recruitment	147,442
Contract Services	8,447,074
Healthcare Fees	2,648,626
Total Professional Services	<u>13,256,016</u>

Communications:

Printing	66,075
Telephone	258,331
Postage	627,061
Travel	69,003
Total Communication	<u>1,020,470</u>

Rentals:

Office Space	157,029
Equipment	307
Total Rentals	<u>157,336</u>

Miscellaneous:

Central Government Charges	11,784,763
Supplies	2,719,987
Maintenance	605,025
Non-Capitalized Equipment	1,206,883
Depreciation and Amortization	3,151,958
Other Expenses	(301,393)
Total Miscellaneous	<u>19,167,223</u>

Total Administrative Expenses:	<u>\$ 79,146,358</u>
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Other Supplementary Information
Schedule of Payments to Consultants and Contractors
For the Fiscal Year Ended June 30, 2022

Individual or Firm	Fees Paid	Nature of Service
ACCENTURE LLP	\$ 427,000	Consulting
ACCURATE CORPORATE SERVICES INC	24,067	Contractual
ADT COMMERCIAL	96	Contractual
AZIMUTH COMMUNICATIONS INC	19,189	Contractual
BENEFITHELP SOLUTIONS	2,965,351	Health Insurance
BUTLER PARTNERS & ASSOCIATES LLC	52,400	Health Insurance
CANTEL SWEEPING	900	Contractual
CASCADE CENTERS INC	13,484	Contractual
CDW	82,121	Contractual
CEDAR MILL CONSTRUCTION COMPANY LLC	1,980	Contractual
CEM-COST EFFECTIVENESS MEASUREMENT INC	50,000	Benchmarking
CITISTREET	3,021,537	Contractual
DEPARTMENT OF ADMINISTRATIVE SERVICES	345,916	Contractual
DEPARTMENT OF JUSTICE	161,873	Legal
DEPAUL INDUSTRIES	28,607	Contractual
EMPLOYMENT DEPARTMENT	111,745	Contractual
FIRST RESPONSE	8,964	Contractual
FREDRICK WILLIAM MILLER MD	51,550	Medical
GARTNER GROUP INC	223,000	Technology
HARVEY & PRICE CO	1,450	Contractual
ICE MILLER	330	Legal
IES COMMERCIAL INC	3,342	Contractual
INDUSTRIAL SOURCE	501	Contractual
LANCESOFT INC	7,967,495	Technology
LANDCARE	24,553	Contractual
LANGUAGE LINE SOLUTIONS INC	1,845	Contractual
LEXISNEXIS RISK DATA MANAGMENT INC	6,214	Technology
MACIAS GINI & O'CONNELL LLP	64,302	Audit
MILLIMAN INC	418,636	Actuarial
MITCHELL INTERNATIONAL INC	6,712	Contractual
NATIONAL INTERPRETING SERVICE INC	3,060	Contractual
OLYMPIC PERFORMANCE INC	1,210	Contractual
OREGON DENTAL SERVICE	2,093,589	Contractual
OREGON UNIONS STATE WORKER	14,776	Contractual
PACIFIC OFFICE AUTOMATION INC	72,000	Contractual
PACIFIC REALTY ASSOCIATES LP	351,575	Contractual
PORTLAND MECHANICAL CONSTRUCTION INC	1,313	Contractual
PROTEMP	5,125	Contractual
RAY KLEIN INC	127	Contractual
RELAY	386	Contractual
THE SEGAL COMPANY	329,000	Contractual
TVW INC	127,066	Contractual
TVWD	7,904	Contractual
ULINE	389	Contractual
VOYA HOLDINGS INC	459,167	IAP Administration
WEST COAST PLANT CO INC	2,283	Contractual
	<u>\$ 19,554,125</u>	

Other Supplementary Information

Other Supplementary Information Summary of Investment Fees, Commissions, and Expenses For the Fiscal Year Ended June 30, 2022

	2022		2022
Debt Securities Managers		Real Estate Portfolio Managers (continued)	
Alliance Bernstein	\$ 553,230	Harrison Street Real Estate Partners IX	\$ 97,356
Ashmore Investment Management	521,517	Harrison Street Real Estate Partners V-A	698,661
Blackrock Financial Management	1,705,719	Harrison Street REP V Co-Investment	193,712
Fidelity Institutional Asset Management	42,453	Harrison Street REP VIII	1,875,000
Global Evolution	449,677	Harrison Street US SA V (Core Account)	81,385
Guggenheim Partners	1,069,585	Harrison Street US SA V (Non-Core Account)	96,616
KKR Asset Management	351,842	Heitman America Real Estate Trust, LP	1,378,592
Morgan Stanley Investment Management	606,762	Heritage Fields Capital	292,659
Oak Hill Advisors	7,017,306	IL & FS India Realty Fund	159,029
PGIM Fixed Income	491,454	IL & FS India Realty Fund II	156,665
PIMCO	807,361	JPMCB Strategic Property Fund	2,599,864
Putnam Investments	675,062	Landmark Real Estate Partners VII, LP	265,005
Schroder Investment Management	967,627	LBA Core Industrial	2,514,876
Wellington Management Company	1,119,509	Lincoln (Non Mandate)	552,043
Western Asset Management Company	1,335,179	Lincoln CIP Industrial Core	5,302,060
Domestic Equity Fund Managers		Lion Mexico Fund	194,080
AQR Capital Management, LLC	892,926	Lionstone One Value Add	3,044,836
Boston Company/Mellon	1,649,805	Lone Star Fund IX	155,469
Callan Associates	1,084,714	Lone Star Fund VIII	76,073
Dimensional Fund Advisors LTD	3,047,047	Lone Star Real Estate Fund II	53
Eudaimonia Asset Management	1,363,181	Lone Star Real Estate Fund IV	217,927
International Equity Fund Managers		Lone Star Real Estate Fund V	244,014
Acadian Asset Management	4,071,448	LORE One, L.P. (Core)	6,083,668
Adrian Lee & Partners	1,300,000	Madison Realty Capital Debt Fund III, LP	1,292,005
AHL Partners LLP	4,203,752	Morgan Stanley Prime Property Fund	3,529,776
Alliance Bernstein International	1,639,767	Nuveen U.S. Cities Multifamily Fund	412,697
AQR Capital Management, LLC	3,227,859	Oak Street Real Estate Capital Fund V	884,833
Arrowstreet Capital, LP	13,580,416	Och Ziff RE III (Sculptor 3)	258,214
Aspect Capital	1,500,000	Oregon Abacus Multifamily Associates LP	2,061,100
Brandes Investment Partners LP	1,895,542	Prologis Targeted Europe Logistics Fund	2,546,005
Dimensional Fund Advisors LTD	4,644,054	Prologis Targeted US Logistic Fund	4,018,757
EAM Investors, LLC	837,546	Regency Core	1,169,680
Genesis Asset Managers	1,814,105	Regency II	1,416,599
Harris Associates	1,963,746	Rockpoint Finance Fund I, LP	1,402
Lazard Asset Management	4,238,456	Rockpoint Growth and Income Fund I, LP	736,602
Los Angeles Capital Management	2,636,596	Rockpoint Real Estate Fund II, LP	2,900
Pangora Asset Management	2,454,099	Rockpoint Real Estate Fund III	36,842
PE Global	1,573,151	Rockpoint Real Estate Fund IV	116,954
Walter Scott Management	2,375,711	RREEF America REIT II	1,125,559
Westwood Global Investments	1,014,106	Sculptor RE IV	1,312,500
William Blair & Company	2,187,453	Starwood Cap Hospitality Fd II Global LP	351,163
Real Estate Portfolio Managers		Vornado Capital Partners LP	195,646.00
ABKB / Lasalle Advisors-Intl	1,040,530	Walton Street Real Estate Core-Plus Fund	703,361
Aetos Capital Asia III	8,222	Waterton Fund IX PT Chicago, LLC	582,000
Aetos Capital Asia TE II	24,309	Waterton Residential Property Venture XII	717,328
AEW Core Property Trust	675,485	Waterton Residential Property Venture XIV	1,500,000
ASB Allegiance RE	1,600,430	Waterton Residential Property XI	149,532
Ascentris - OR Partners LLC	5,021,356	Windsor Columbia Realty Fund	9,902,642
Ascentris Core	1,544,129	Private Equity Portfolio Managers	
Beacon Capital Strategic Partners VI, LP	616	A&M Capital Partners	318,691
Blackstone Real Estate Partners IX, LP	3,750,000	A&M Capital Partners Europe	2,274,885
Blackstone Real Estate Partners VII, LP	493,118	A&M Capital Partners II	2,271,282
Brazil Real Estate Opportunities II	490,268	A&M Capital Partners III	1,656,164
Cameron Village	561,890	ACON Equity Partners IV	1,407,824
Clarion	671,787	Advent Global Technology	639,797
Clarion (Non Mandate)	386,162	Advent Global Technology II	1,076,087
Clarion Columbia Office Property	4,624,503	Advent International Global Private Equity IX	1,458,399
Columbia Woodbourne Holdings, LLC	363,313	Advent International Global Private Equity VI A	141,419
DivcoWest Fund IV REIT, LP	63,258	Advent International Global Private Equity VII C	233,742
DivcoWest Fund V	2,008,551	Advent Latin American Private Equity VI	934,665
DivcoWest Fund VI	1,942,371	Advent Latin American Private Equity VII	3,000,000
DW Columbia Perfco	1,699,964	Alpine Investors VIII	2,164,384
GID Mainstay Fund	340,831	APAX IX	2,423,655
Harrison Street Core Property Fund Co-Investment	396,448	APAX VIII	645,328
Harrison Street Real Estate Core Property	1,641,936	Apollo Investment Fund IX	6,240,000

Other Supplementary Information
 Summary of Investment Fees, Commissions, and Expenses
 For the Fiscal Year Ended June 30, 2022

	2022		2022
Private Equity Portfolio Managers (continued)		Private Equity Portfolio Managers (continued)	
Apollo Investment Fund VIII	\$ 315,333	KKR North America Fund XII	\$ 4,156,667
Aquiline Financial Services Fund III	559,115	KKR North America Fund XIII	3,437,500
Aquiline Financial Services Fund IV	3,500,001	KPS Special Situations Fund V	625,000
Arsenal Capital Partners Growth	750,000	KSL Capital Credit Opportunities Fund	52,194
Arsenal Capital Partners VI	1,870,879	KSL Capital Partners Fund III	320,411
Baring Asia Fund V	301,633	KSL Capital Partners Fund IV	1,418,789
Blackstone Capital Partners VI	253,061	KSL Capital Partners Fund V	2,998,521
Blackstone Capital Partners VII	3,171,480	Lion Capital Fund II	(36,549)
Blackstone Capital Partners VIII	6,250,000	Luminate Capital Partners Fund III	3,000,100
Blackstone Energy Partners II	1,330,527	Mayfield Select	57,359
Bridgepoint Europe VI	3,791,475	Mayfield Select II	50,501
Bridgepoint Europe VI (Sidecar)	108,044	Mayfield XIV	504,996
Capital International Private Equity Fund VI	633,083	Mayfield XV	636,364
CDH Fund V	1,079,469	Mayfield XVI	330,513
Centerbridge Capital Partners II	4,477	MBK Partners Fund IV	2,295,818
Centerbridge Capital Partners III	1,215,001	MHR Institutional Partners IV	2,279,549
Centerbridge Capital Partners IV	4,612,330	Nordic Capital Fund VIII	512,978
Centerbridge Special Credit Partners III	5,253,565	North Haven Private Equity Asia IV	258,764
Cinven VI Fund	1,343,176	Novalpina Capital Fund I	2,195,298
Cinven VII Fund	3,145,520	Oak Investments Partners XIII	109,643
Clearlake Capital Partners VI	2,625,000	Oaktree European Principal Fund III (US)	617,871
Clearlake Capital Partners VII	3,178,767	Oaktree Opportunities Fund IX	702,580
Clearvue Partners III	2,400,000	Oaktree Opportunities Fund VIIIb	279,575
CVC Capital Partners Asia V	2,250,000	Oaktree Opportunities Fund X	532,101
CVC Capital Partners VI (A)	1,214,014	Oaktree Opportunities Fund Xb	1,600,000
CVC Capital Partners VII (A)	2,360,469	Oaktree Opportunities Fund XI	2,624,516
CVC Capital Partners VIII	5,476,575	Odyssey Investment Partners Fund VI	3,000,000
EnCap Energy Capital Fund X	869,625	OrbiMed Private Investments V	258,616
EnCap Energy Capital Fund XI	3,750,000	OrbiMed Private Investments VI	778,459
Fifth Cinven Fund	277,329	Orchid Asia VI	648,483
Francisco Partners Agility II	750,000	Palladium Equity Partners IV	766,367
Francisco Partners III	325,228	Palladium Equity Partners V	4,000,000
Francisco Partners IV	1,212,393	Pathway Private Equity Fund III-B	966,663
Francisco Partners V	2,062,060	Pathway Private Equity Fund III-CO	2,233,397
Francisco Partners VI	3,387,938	Permira VI	2,358,949
General Atlantic Partners	10,029,500	Permira VII	3,066,821
Genstar IX Opportunities Fund I	2,305,488	Permira VIII	1,628,930
Genstar VIII Opportunities Fund I	1,716,666	Providence Equity Partners VII	425,401
Genstar X Opportunities Fund I	2,293,707	Public Pension Capital	1,226,038
GGV Capital Select	230,665	Rhône Partners IV	97,130
GGV Capital V	656,312	Rhône Partners V	938,179
GGV Capital VI	703,095	Riverside Europe Fund IV	(93,321)
GGV Capital VII	1,090,983	Roark Capital Partners IV	993,425
GGV Capital VIII	1,350,000	Roark Capital Partners V	3,091,048
GGV Discovery II	357,454	Roark Capital Partners VI	4,375,000
GGV Discovery III	562,500	RRJ Capital Master Fund II	177,148
GI Partners Fund IV	1,052,444	RRJ Capital Master Fund III	862,069
GI Partners Fund V	3,100,234	Sherpa Healthcare Co-Investment	100,000
Granite Ventures II	92,699	Sherpa Healthcare I	838,381
Green Equity Investors VI	705,114	Sherpa Healthcare II	1,125,000
Green Equity Investors VII	1,786,485	TA XIV	943,109
GTCR Fund XII	2,333,863	Tailwind Capital Partners II	128,204
GTCR Fund XIII	3,299,523	Tailwind Capital Partners III	1,250,000
GTCR Strategic Growth Fund	527,727	TDR Capital III	677,808
Hamilton Lane International SMID Fund	796,628	TDR Capital IV	3,276,030
Hellman & Friedman Capital Partners IX	2,926,101	The Baring Asia Private Equity Fund VI	452,121
Hellman & Friedman Capital Partners VIII	576,174	Thoma Bravo Fund XIV	3,750,000
Hellman & Friedman Capital Partners X	5,249,996	Thoma Bravo Fund XV	865,385
KKR 2006 Fund	1,308,001	TPG Growth II	14,157
KKR Asian Fund	61,506	TPG Growth III (A)	1,386,249
KKR Asian Fund II	1,028,101	TPG Growth IV	1,821,696
KKR Asian Fund III	2,465,604	TPG Growth V	3,718,749
KKR European Fund II	25,519	TPG Healthcare Partners	1,275,001
KKR European Fund III	168,551	TPG Partners VII	2,094,780
KKR North America Fund XI	623,333	TPG Partners VIII	5,099,999

Other Supplementary Information

Other Supplementary Information Summary of Investment Fees, Commissions, and Expenses For the Fiscal Year Ended June 30, 2022

	2022		2022
Private Equity Portfolio Managers (continued)		Real Assets Portfolio Managers (continued)	
USV 2019	\$ 217,500	Starwood Energy Infrastructure Fund III	\$ 2,250,000
USV 2021	465,000	Stonepeak Global Renewables Fund	1,363,648
USV Climate 2021	420,000	Stonepeak Infrastructure Fund	569,862
USV Opportunity 2019	164,063	Stonepeak Infrastructure Fund II	2,651,270
Veritas Capital Fund IV	26,581	Stonepeak Infrastructure Fund III	3,502,618
Veritas Capital Fund V	1,294,846	Stonepeak Infrastructure Fund IV	4,783,730
Veritas Capital Fund VI	2,839,954	Taurus Mining Finance Annex Fund	56,563
Veritas Capital Fund VII	3,903,869	Taurus Mining Finance Fund	87,541
Vestar Capital Partners V	4,727	Taurus Mining Finance Fund II	1,875,000
Vista Equity Partners Fund IV	617,418	Tillridge Global Agribusiness Partners II	1,463,287
Vista Equity Partners Fund V	1,872,863	Twin Creeks Timber	590,581
Vista Equity Partners Fund VI	7,500,000	Warwick Partners III	2,376,071
Vista Equity Partners Fund VII	7,500,000	Warwick Partners IV	4,000,000
Vista Foundation Fund II	848,138	Westbourne Infrastructure Debt 6	487,124
Vista Foundation Fund III	3,224,082	Diversifying Strategies Portfolio Managers	
Vitruvian Investment Partns IV	3,117,437	AQR Multi-Strategy Fund X	3,846,622
Wellspring Capital Partners V	133,184	Aspect Core Trend HV Fund	5,274,472
Real Assets Portfolio Managers		Blackrock Style Advantage	516,652
Alinda Infrastructure Fund II	248,499	Brevan Howard	424,625
Alterna Core Capital Assets Fund II	831,814	Bridgewater All Weather	2,190,436
Appian Natural Resources Fund	695,962	Bridgewater Optimal Portfolio	5,819,747
Appian Natural Resources Fund II	2,000,000	Caxton Global Investments (USA)	656,193
Blackstone Energy Partners III	2,500,000	Davidson Kempner Institutional Partners	312,500
Brookfield Agriculture Fund II	(1,280,734)	Fort Global Trend Fund Series A 2020	1,670,287
Brookfield Infrastructure Fund III B	3,017,103	GMO Systematic Global Macro	1,231,291
Brookfield Infrastructure Fund IV	4,139,603	Hudson Bay Fund	1,250,000
Brookfield Super-Core Infrastructure Partners	456,897	Man AHL Alpha 1.5X	968,706
Brookfield Timberlands Fund V	109,856	Man AHL Alpha Core 1.5X	357,729
Cube Infrastructure Fund III	2,082,854	Reservoir Strategic Partners Fund	577,083
Digital Colony Partners	1,662,754	Opportunity Portfolio Managers	
EMR Capital Resources Fund II	1,834,724	Arctos Sports Partners Fund I	2,175,000
EnCap Flatrock Midstream Fund III	527,770	Blackstone Tactical Opportunity Fund	1,605,897
EnCap Flatrock Midstream Fund IV	1,695,000	Blackstone Tactical Opportunity Fund II	157,044
Energy & Minerals III	1,681,030	Blue Torch Credit Opportunities Fund II	832,645
Enervest XIV	758,271	Clearlake Flagship Plus Partners	937,430
EQT Infrastructure Fund III	2,232,924	Content Partners Fund 3	438,381
EQT Infrastructure Fund IV - USD Fund	3,401,482	Fidelity Real Estate Opportunistic Income Fund	1,117,595
EQT Infrastructure Fund V	4,550,000	Lone Star Fund X	210,227
EQT Infrastructure V Co-Investment Fund	12,275	Nephila Juniper	28,987
GIP Aquarius Fund	281,250	Nephila Palmetto	122,605
Global Infrastructure Partners Capital Solutions Fund	1,640,037	OHA Tactical Investment Fund	3,214,171
Global Infrastructure Partners II A1	1,194,247	OrbiMed Royalty Opportunities Fund II	132,778
Global Infrastructure Partners III	4,795,470	Pathlight Capital Fund II	1,909,247
Global Infrastructure Partners IV	5,200,000	Sanders Capital All Asset Value Fund	4,063,207
Harrison Street SIF Co-Investment I	129,500	Sixth Street Specialty Lending Europe II	637,650
Harrison Street Social Infrastructure Fund	1,443,354	TPG Specialty Lending Europe I (US Feeder)	353,952
Highstar Capital Fund IV	576,580	TSSP Adjacent Opportunities Partners	3,775,465
Homestead Capital USA Farmland Fund II	1,352,981	TSSP TAO Contingent	1,020,666
International Infrastructure Finance Company Fund	162,490	Whitehorse Liquidity Partner IV	1,400,000
LS Power Equity Partners III Feeder 1	852,966	Whitehorse Liquidity Partner V	1,050,000
LS Power Equity Partners IV	3,000,000	Russell Investments - Cash Overlay	1,188,650
NGP Agribusiness Follow-on Fund	788,175	BlackRock - Variable Fund	201,165
NGP Natural Resources X	315,977	IAP Target Date Funds: Alliance Bernstein	3,968,263
NGP Natural Resources XI	1,920,644	IAP Target Date Funds: State Street Bank	450,694
NGP Natural Resources XII	3,745,563	Brokerage Commissions	9,319,061
NGP Royalty Partners	1,405,107	Consulting and Subscription Fees	11,858,566
Northern Shipping Fund III	585,917	State Street Bank:	
Northern Shipping Fund IV	2,249,999	Incentive Fee/Carried Interest	597,807,719
Orion Mine Finance Fund I	163,660	Foreign Income Taxes	26,370,594
QL Capital Partners	1,918,359	Operating Expenses ¹	144,446,789
Reservoir Resource Partners	13,849	Other Expenses ²	18,697,631
Sheridan Production Partners III-B	229,588	State Treasury Fees	28,772,241
Silver Creek Aggregate Reserves Fund I	230,519	Deferred Compensation Investment Fees and Expenses	6,475,339
Sprott Private Resource Royal	1,336,233	Total Investment Fees, Commissions and Expenses	<u>\$ 1,442,410,880</u>

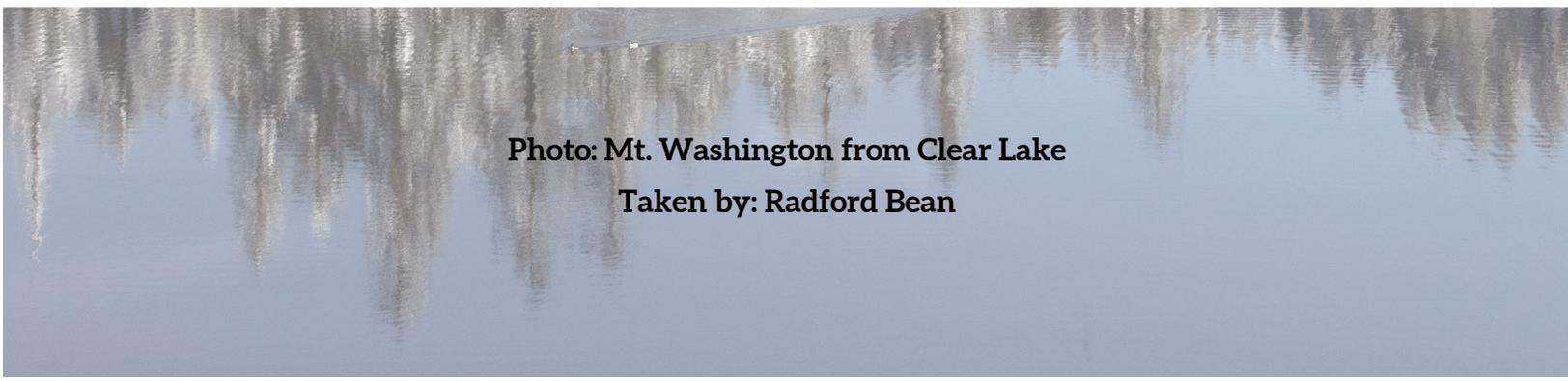
¹Start up fee for new private equity fund and improvement made to real estate property.

²Expenses related to legal, travel, and other adjustments. Negative expenses are due to adjusting entries, reimbursements, and litigation settlement.

Note: Negative management fees are due to adjusting entries and reimbursements.



INVESTMENT SECTION



**Photo: Mt. Washington from Clear Lake
Taken by: Radford Bean**

OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM





Tobias Read
Oregon State Treasurer

Michael Kaplan
Deputy State Treasurer

August 28, 2022

Dear PERS Members:

The Investment Division of the Oregon State Treasury (OST) manages a collection of portfolios on behalf of the State, which help fund many important State objectives including retirement security for public sector employees, academic support for Oregon schoolchildren, and compensation claims for injured state workers. In aggregate, the Investment Division oversees assets of approximately \$134 billion as of June 30, 2022. This portfolio includes the Oregon Public Employee Retirement Fund (OPERF), which advanced 6.32% last fiscal year, totaled \$96.9 billion at June 30, 2022 and comprised the Oregon Public Employee Retirement System Defined Benefit Pension Plan, the Individual Account Program of the Oregon Public Service Retirement Plan and other post-employment benefit plans.

Consistent with institutional investment standards, OPERF is broadly and deliberately diversified across multiple domains, including, but not limited to, several asset classes and geographies. On behalf of all Oregon Public Employee Retirement System beneficiaries, OPERF assets are commingled, invested consistent with a common set of objectives and allocated among the following seven, strategic investment categories: public equity, private equity, real estate, fixed income, risk parity, real assets, and diversifying strategies. Return expectations and target allocations for each of these six categories are developed between staff and external consultants; moreover, return forecasts contemplate a 20-year investment horizon. Importantly, equity-oriented investments represent OPERF's largest capital allocation. While improving the likelihood of generating an adequate, long-term return, this equity-biased approach also produces higher levels of uncertainty of short-term portfolio return. The breadth of diversification that underpins the OPERF portfolio attempts to lower the State's risk in the variability of contribution rates and funded status.

With the dramatic rise in inflation over this past fiscal year, the global markets have retreated; however, our highly diversified portfolio has provided for steadier returns. The Consumer Price Index has consistently been running in excess of 8.0% year-over-year, which are levels we have not experienced since the 1970's into the early 1980's. The rise in inflation has corresponded to a rise in the yield for 3-Month US Treasury Bills from nearly 0.0% to above 2.0% during this fiscal year. As expected, this rise in inflation and interest rates has led to a global equity market sell-off, with the MSCI ACWI IMI Net index down 16.5%¹. Despite this significant decline in the global equity markets, OPERF Regular Account produced a gain of 6.3%. As we have noted in the past, our highly diversified portfolio tends to lag when the equity markets are producing above average positive returns, but also tends to perform better relative to equity markets when risky assets are declining rapidly as we have experienced over this past fiscal year. While acknowledging risks, we can also see the benefits of our equity-biased investment strategy, as evidenced by the performance numbers as returns across

¹ All performance figures cited throughout this letter are based on market values and time-weighted return calculations.



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Tobias Read
Oregon State Treasurer

Michael Kaplan
Deputy State Treasurer

multiple timeframes exceed estimated returns from prior strategic asset allocation discussions by the Oregon Investment Council and PERS Board. Annualized net returns for the five- and ten-year periods ended June 30, 2022 were 9.4% and 9.3%, respectively.

The U.S. stock market (as measured by the Russell 3000 index) generated a loss last fiscal year (FY 2022), of 13.9% over the 12-month period ended June 30, 2022. With a net loss of 12.9%, OPERF's U.S. public equity portfolio outpaced its Russell 3000 benchmark due to an emphasis on equity "style" factors such as value and small capitalization stocks. Foreign equities continued to lag domestic stocks in FY 2022. OPERF managers investing abroad produced a collective 16.5% loss last fiscal year, better than the 19.9% loss by OPERF's non-U.S. public equity benchmark, the MSCI ACWI Ex-US IMI Net index.

With an estimated fiscal year-end value of \$26.1 billion, OPERF's private equity investments represented 28.0% of total OPERF assets at June 30, 2022, and generated a net gain of 24.2% in FY 2022. At 15.5%, average annual returns over the previous 10-year period fell short of the 17.7% return for the benchmark, the Russell 3000 (lagged one quarter) plus 300 basis points.

In real estate, OPERF capital is allocated across four property or security types: core, value-add, opportunistic, and publicly-traded real estate investment trusts (i.e., REITs). In FY 2022, OPERF's real estate investments generated a 29.6% net return, ahead the 27.3% return on OPERF's real estate benchmark, the NCREIF Fund Index – Open End Diversified Core Equity, lagged one quarter. At fiscal year-end, these real estate investments were valued at \$12.7 billion, and represented 13.6% of total OPERF assets. For the ten-year period ended June 30, 2022, OPERF's real estate portfolio delivered a net 11.3% on an average annual basis, ahead of the benchmark's 9.8% average annual return during that same period.

Bond markets delivered negative results in FY 2022, due to the fast rise in interest rates and inflation. Investments in fixed income securities comprised 19.8% of total OPERF assets at June 30, 2022, and produced a loss of 9.1% net return in FY 2022, but still beating the loss of 10.1% return recorded by OPERF's custom fixed income benchmark.

In 2021, the Oregon Investment Council officially adopted the separation of the "Alternatives" portfolio into its components parts of Real Assets and Diversifying Strategies. These two programs produced returns of 23.2% and 17.1%, respectively, for FY 2022. Both programs beat their respective benchmarks. The Real Assets program is benchmarked to CPI+4%, which produced a gain of 13.4% for the fiscal year. The Diversifying Strategies benchmark is the HFRI: FoF Conservative Index, which was nearly flat for this period at 0.1% gain. Rounding out the asset classes, Risk Parity produced a loss of 13.0%, lagging its benchmark as the S&P Risk Parity – 12% Target Volatility lost 6.7%.



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**OREGON
STATE
TREASURY**

Tobias Read
Oregon State Treasurer

Michael Kaplan
Deputy State Treasurer

Sincerely,

Rex T. Kim

Chief Investment Officer



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Investment Objectives

The function of PERS is to provide present and future retirement or survivor benefits for its members. The investment program – comprising the Oregon Public Employees Retirement Fund (OPERF), which includes PERS' Defined Benefit Pension Plan, Oregon Public Service Retirement Plan – Individual Account Program, and other postemployment benefit plans – is managed to provide long-term financial security for PERS members while maintaining the Fund's stability and future productivity. The OIC has established policies that promote and guide investment strategies with the highest probability of achieving the PERS Board's approved, actuarial discount rate at a corresponding risk level deemed acceptable for both active and retired PERS members.

Description of Investment Policies

Oregon Revised Statute (ORS) 293.706 established the Oregon Investment Council (OIC), which consists of five voting members. Four members of the council, who are qualified by training and experience in the field of investment or finance, are appointed by the governor subject to state senate confirmation. The State Treasurer serves as the council's remaining voting member. In addition, the director of PERS serves as a non-voting OIC member.

ORS 293.701 defines the investment funds over which OIC has responsibility. Included are the OPERF and the Deferred Compensation Fund. OIC establishes policies for the investment and reinvestment of moneys in the investment funds as well as the acquisition, retention, management, and disposition of investments in the investment funds. OIC is also responsible for providing an examination of the effectiveness of the investment program.

OIC ensures moneys in the investment funds are invested and reinvested to achieve the investment objective of making the moneys as productive as possible. Furthermore, the investments of those funds are managed as a prudent investor would do under the prevailing circumstances and in light of the purposes, terms, distribution requirements, and laws governing each investment fund. This standard requires the exercise of reasonable care, skill, and caution; it is applied to investments not in isolation but in the context of each fund's portfolio as part of an overall investment strategy. The strategy should incorporate risk and return objectives reasonably suitable to the particular investment fund.

When implementing investment decisions, OIC has a duty to diversify the investments of the investment funds unless, under the circumstances, it is not prudent to do so. In addition, OIC must act with prudence when selecting agents and delegating authority. OIC has approved the following asset classes for OPERF: Short-Term Investing, Fixed Income, Real Estate, Public and

Private Equities, Real Assets, and Diversifying Strategies. In addition, OPERF invests in the Opportunity Portfolio, which may be populated with investment approaches across a wide range of investment opportunities with no limitation as to asset classes or strategies. OIC must approve, in advance, the purchase of investments in a new asset class not described above.

OIC has an open-door policy wherein investment officers employed by the Oregon State Treasury will hear and consider investment proposals and solicitations from any person, firm, or partnership that submits a proposal or solicitation in good faith. However, under no circumstance does this policy require that the Oregon State Treasury purchase the proposed investment.

OIC maintains an equal opportunity policy. When awarding contracts or agreements, OIC does not discriminate because of age, race, color, sex, religion, national origin, marital status, sexual orientation, or disability. Furthermore, OIC encourages firms doing or seeking to do business with OIC to have equal opportunity programs. OIC requires that all written contracts or agreements with OIC incorporate a reference that affirms compliance with applicable nondiscrimination, equal opportunity, and contract compliance laws.

In compliance with ORS 192.630-660, OIC holds its meetings in a public forum. Public notice, including a meeting agenda, is provided to interested persons and news media who have requested notice. Written minutes and recordings are taken at all meetings.

OIC regularly reviews various aspects of investment policy, performance of investment managers and accounts, asset allocation, and a large number of investment proposals and recommendations. OIC's statement of Investment Objectives and Policy Framework is available on the Oregon State Treasury website at <https://www.oregon.gov/treasury/invested-for-oregon/Documents/Invested-for-OR-OIC-INV/Invested-for-OR-OIC-INV-1203--Statement-of-Investment-Objectives-and-Policy-Framework.pdf>

Investment Section

Investment Results*

	Periods Ended June 30, 2022		
	1-Year	Annualized	
		3-Year	5-Year
Total Portfolio, Excluding Variable Account	6.32 %	10.30 %	9.36 %
OPERF Policy Benchmark ¹	(0.66)	8.95	8.65
Variable Account	(16.21)	6.31	7.05
Benchmark: MSCI All Country World Investable Market Index Net	(16.52)	5.98	6.70
Domestic Stocks	(12.92)	8.61	9.18
Benchmark: Russell 3000 Index	(13.87)	9.77	10.60
International Stocks	(16.47)	4.62	4.59
Benchmark: MSCI All Country World ex-US Investable Market Index Net	(19.86)	1.55	2.50
Fixed Income Segment	(9.05)	(0.25)	1.33
Benchmark: Oregon Custom Index ²	(10.12)	(0.86)	0.92
Risk Parity ³	(12.95)	n/a	n/a
Benchmark: S&P Risk Parity - 12% Target Volatility	(6.67)	n/a	n/a
Real Estate	29.61	13.61	11.02
Benchmark: Oregon Custom Real Estate Benchmark ⁴	27.26	10.30	8.90
Private Equity	24.23	21.86	19.64
Benchmark: Russell 3000 Index + 300 bps (Adj.) ⁵	15.25	21.74	18.82
Real Assets ⁶	23.15	9.60	7.15
Benchmark: Consumer Price Index + 4%	13.39	9.16	8.02
Diversifying Strategies ⁶	17.09	2.80	0.68
Benchmark: HFRI FOF Conservative Index	0.13	4.65	4.03
Opportunity Portfolio	10.19	13.04	9.92
Benchmark: Consumer Price Index + 5%	14.47	10.20	9.06

The rates of return reported in the Investment Section are based on a time-weighted rate of return methodology based upon market values, unless disclosed otherwise in the footnotes to the associated tables.

¹From July 1, 2016 to March 31, 2018 the policy benchmark was 20% Russell 3000+300 Bps quarter lag, 22.5% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 40% MSCI ACWI IMI Net and 5% CPI+4%. From April 1, 2018 to December 31, 2018 the policy benchmark was 19% Russell 3000+300 Bps quarter lag, 22% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 39% MSCI ACWI IMI Net and 7.5% CPI+4%. From January 1, 2019 to June 30, 2020 the policy benchmark was 19% Russell 3000+300 Bps quarter lag, 21% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 37.5% MSCI ACWI IMI Net and 10% CPI+4%. From July 1, 2020 to September 30, 2021 the policy benchmark was 19% Russell 3000+300 Bps quarter lag, 20% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 33.5% MSCI ACWI IMI Net, 12.50% CPI+4%, and 2.50% S&P Risk Parity - 12% Target Volatility. From October 1, 2021 to Present the policy benchmark is 20% Russell 3000+300 Bps quarter lag, 20% BBG U.S. Aggregate, 12.50% NCRIF ODCE (Custom), 30% MSCI ACWI IMI Net, 7.50% CPI+4%, 7.50% HFRI FOF Conservative Index and 2.50% S&P Risk Parity - 12% Target Volatility.

²From March 1, 2016 to September 30, 2021, index was 46% BBG Aggregate Bond, 37% BBG Treasury, 13% S&P LSTA and 4% BofA ML High Yield Master II. From October 1, 2021 to Present, index is 100% Bloomberg U.S. Aggregate.

³Inception date is May 1, 2020.

⁴Starting July 1, 2017, methodology for monthly return is calculated by geometrically linking prior months returns, and then deriving the monthly returns by calculating the geometric average. Returns are not actual monthly, but rather equivalent for all intra-quarter months, in order to match the actual quarterly return.

⁵From July 1, 2017, the monthly return is calculated as the geometrically linked monthly-portion of the quarterly return. Returns are not actual monthly, but rather equivalent for all intra-quarter months, in order to match the actual quarterly return.

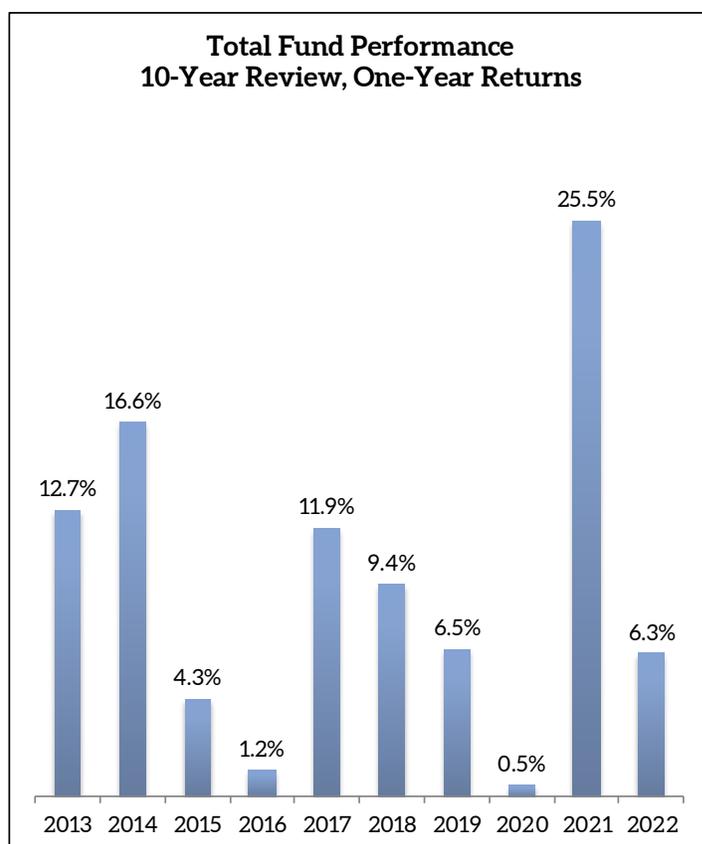
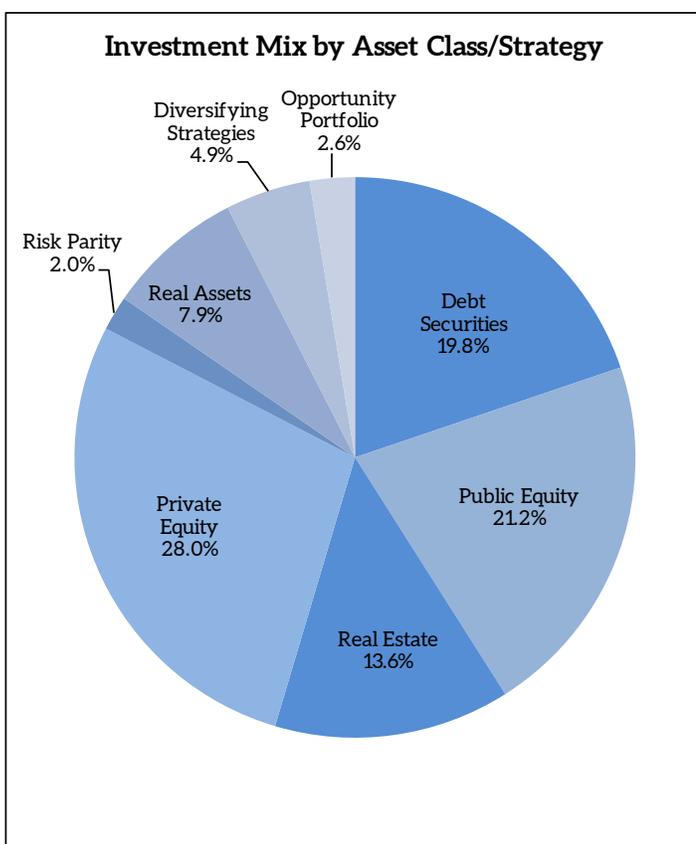
⁶Beginning October 1, 2021, the Alternatives Portfolio has been split up into new portfolios: Real Assets and Diversifying Strategies.

* Investment Results are based upon OIC asset classes as determined by each manager's primary investment type, not the financial statement classification of individual holdings.

OIC Target and Actual Investment Allocation as of June 30, 2022*

Asset Class/Strategy	OIC Policy Range	OIC Target Allocation	Asset Class/Strategy	Actual Allocation ²
Debt Securities	15.0 - 25.0 %	20.0 %	Debt Securities	19.8 %
Public Equity	25.0 - 35.0	30.0	Public Equity	21.2
Real Estate	7.5 - 17.5	12.5	Real Estate	13.6
Private Equity	15.0 - 27.5	20.0	Private Equity	28.0
Risk Parity	0.0 - 3.5	2.5	Risk Parity	2.0
Real Assets	2.5 - 10.0	7.5	Real Assets	7.9
Diversifying Strategies	2.5 - 10.0	7.5	Diversifying Strategies	4.9
Opportunity Portfolio ¹	0.0 - 5.0	0.0	Opportunity Portfolio	2.6
Total		100.0 %	Total	100.0 %

¹Opportunity Portfolio is an investment strategy and it may be invested up to 5% of total Fund assets.
²Based on the actual investment value at 6/30/2022.
³In October 2021 the Alternatives Portfolio was split into Real Assets and Diversifying Strategies.



* The OIC Target Allocations are based on OIC asset classes as determined by each manager's primary investment type, not the financial statement classification of individual holdings. The Target Allocation amounts do not include Deferred Compensation Plan investments. The Actual Investment Allocation is based on the financial statement investment classifications, including Deferred Compensation Plan investments. Risk Parity is included with the Diversifying Strategies.

List of Largest Assets Held

Largest Stock Holdings (by Fair Value)
June 30, 2022

<u>Description</u>	<u>Shares</u>		<u>Fair Value</u>
Microsoft Corporation	1,411,396	\$	362,488,835
Apple Inc.	2,645,281		361,662,818
Johnson & Johnson	1,121,395		199,058,826
Pfizer Inc.	3,209,267		168,261,869
Unitedhealth Group Inc.	323,467		166,142,355
Alphabet Inc. Class A	70,990		154,705,667
Alphabet Inc. Class C	65,982		144,332,326
Abbvie Inc.	832,890		127,565,432
Berkshire Hathaway Inc. Class B	440,040		120,139,721
Meta Platforms Inc. Class A	723,003		116,584,234

Largest Bond Holdings (by Fair Value)
June 30, 2022

<u>Description</u>		<u>Par Value</u>		<u>Fair Value</u>
FNMA TBA 30 Year Single Family Conventional 5% Issue August 2052	\$	260,004,000	\$	264,599,774
U.S. Treasury Note 2.250% Due November 15, 2025		211,200,000		205,705,501
FNMA TBA 30 Year Single Family Conventional 4.5% Issue August 2052		191,406,000		195,952,804
U.S. Treasury Note 1.750% Due July 31, 2024		200,700,000		195,666,821
U.S. Treasury Note 2.250% Due August 15, 2046		201,000,000		162,071,952
U.S. Treasury Note 0.125% Due February 15, 2024		158,300,000		151,244,520
U.S. Treasury Note 1.250% Due August 15, 2031		172,190,000		148,231,377
U.S. Treasury Note 0.625% Due July 31, 2026		160,794,000		145,820,059
U.S. Treasury Note 2.250% Due November 15, 2024		144,420,300		141,971,925
U.S. Treasury Note 1.250% Due June 30, 2028		152,500,000		137,184,472

A complete list of portfolio holdings may be requested from the Oregon State Treasury, 350 Winter Street NE, Suite 100, Salem, OR 97301-3896.

Schedule of Fees and Commissions For the Fiscal Year Ended June 30, 2022

	Assets Under Management	Fees	Percentage
Investment Managers' Fees:			
Debt Securities Managers	\$ 19,201,300,293	\$ 17,714,283	0.0923 %
Public Equity Managers	23,715,061,151	71,004,252	0.2994
Real Estate Managers	13,484,899,469	90,653,217	0.6723
Private Equity Managers	24,588,062,306	274,264,054	1.1154
Real Assets Managers	7,493,706,329	94,747,844	1.2644
Diversifying Strategies Managers	5,192,616,827	25,096,343	0.4833
Opportunity Portfolio Managers	2,248,492,239	25,182,947	1.1200
Total Assets Under Management	\$ 95,924,138,614		
Other Investment Service Fees:			
Investment Consultants		11,858,566	
Commissions and Other Fees		831,889,374	
Total Investment Service and Managers' Fees		\$1,442,410,880	

Schedule of Broker Commissions For the Fiscal Year Ended June 30, 2022

Broker's Name	Commission	Shares / Par	Commission per Share
Goldman, Sachs & Co.	\$ 2,110,680	\$ 112,731,680	\$ 0.0187
Instinet	1,099,768	522,396,068	0.0021
Barclays Capital	497,392	222,790,588	0.0022
J.P. Morgan	461,693	311,237,101	0.0015
Morgan Stanley	409,769	133,866,592	0.0031
Citigroup	390,147	137,614,177	0.0028
BofA Securities, Inc.	379,182	46,669,020	0.0081
UBS	352,000	133,666,219	0.0026
Pershing Securities, LLC	299,627	814,344,018	0.0004
Jefferies	284,944	88,587,915	0.0032
Credit Suisse	238,815	269,901,456	0.0009
Merrill Lynch	235,493	108,412,845	0.0022
HSBC Securities	219,746	244,336,694	0.0009
Virtu	199,889	33,899,188	0.0059
Société Générale	135,619	85,807,956	0.0016
JonesTrading Institutional Services LLC	125,694	6,335,321	0.0198
Macquarie Securities	118,989	93,701,689	0.0013
Cowen and Company, LLC	109,130	9,373,094	0.0116
Liquidnet	104,240	19,818,217	0.0053
Piper Jaffray	102,282	7,549,052	0.0135

Brokerage commissions on purchases and sales are too numerous to list; therefore, only the top 20 brokers by amount of commission paid are shown.

Investment Section

Investment Summary

Type of Investment	Fair Value as of June 30, 2022	Percent of Total Fair Value ¹
Debt Securities		
US Government Securities	\$ 8,254,405,065	8.61 %
US Agency Securities	2,281,544,079	2.38
International Debt Securities	1,153,680,734	1.20
Non-US Government Debt Securities	1,395,606,265	1.46
Corporate Bonds	1,600,651,572	1.67
Bank Loans	1,288,904,402	1.34
Municipal Bonds	35,833,562	0.04
Asset-Backed Securities ³	995,682,664	1.04
Guaranteed Investment Contracts ²	302,017,127	0.31
Domestic Fixed Income Funds	960,016,206	1.00
Global Fixed Income Funds	893,258,617	0.93
Repurchase Agreements	39,700,000	0.04
Total Debt Securities	19,201,300,293	20.02
Public Equity		
Derivatives in Asset Positions	5,841,579	0.01
Domestic Equity Securities	11,035,418,382	11.51
International Equity Securities	6,804,294,094	7.09
Domestic Equity Funds	3,597,615,173	3.75
Global Equity Funds	684,340,569	0.71
International Equity Funds	758,844,722	0.79
Target Date Funds	789,884,105	0.82
Oregon Savings Growth Plan - Self Directed	38,822,527	0.04
Total Public Equity	23,715,061,151	24.72
Real Estate	13,484,899,469	14.06
Private Equity	24,588,062,306	25.64
Real Assets	7,493,706,329	7.81
Diversifying Strategies	5,192,616,827	5.41
Opportunity Portfolio	2,248,492,239	2.34
Total Fair Value	\$ 95,924,138,614	100.00 %

¹ These percentages do not include cash and cash equivalents.

² Guaranteed Investment Contracts are stated at contract value.

³ Asset-Backed Securities includes Collateralized Mortgage Obligations, and Commercial Mortgage Backed Securities.



ACTUARIAL SECTION

Photo: Chambers Covered Railroad Bridge in Cottage Grove

Taken by: Radford Bean

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PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM





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November 23, 2022

Public Employees Retirement Board
 Oregon Public Employees Retirement System

Re: **Actuarial Valuation as of December 31, 2021**

Dear Members of the Board,

As part of our engagement with the Oregon Public Employees Retirement System ("PERS" or "the System"), we performed an actuarial valuation of PERS as of December 31, 2021. Our findings are set forth in the system-wide December 31, 2021 Actuarial Valuation report, issued September 19, 2022. Previously, we published a system-wide December 31, 2020 Actuarial Valuation report, which was issued December 9, 2021. Both reports reflect the benefit provisions of the system in effect as of those valuation dates as well as Senate Bill 111 and House Bill 2906 signed into law in June 2021.

Both the December 31, 2021 Actuarial Valuation and the December 31, 2020 Actuarial Valuation are used to develop information provided in the Annual Comprehensive Financial Report (ACFR) for Oregon PERS. The December 31, 2021 Actuarial Valuation forms the basis for the *Actuarial Section* of the ACFR. The December 31, 2020 Actuarial Valuation is used to develop the financial reporting results required by Governmental Accounting Standards Board (GASB) Statement No. 67 for the Tier One/Tier Two and OPSRP programs and by GASB Statement No. 74 for the RHIA and RHIPA programs.

Actuarial Section of the ACFR

The material included in the *Actuarial Section* of the ACFR for Oregon PERS is a subset of the results contained in the December 31, 2021 Actuarial Valuation. The descriptions in that report regarding the actuarial basis of the valuation and the material inputs and limitations of use of the valuation apply to the ACFR exhibits and are incorporated herein by reference.

Actuarial valuations are performed annually, but only "rate-setting" valuations performed as of the end of each odd-numbered year are used to set actuarially determined biennial contribution rates. Those rates are then considered for adoption by the Public Employees Retirement Board ("PERB"). Interim valuations performed as of the end of each even-numbered year are only advisory in nature, and contribution rates developed in those valuations are not presented to the PERB for adoption.

The PERB has sole authority to determine the actuarial assumptions and methods used for the valuation. The actuarial assumptions and methods used in both the December 31, 2021 and the December 31, 2020 Actuarial Valuation were adopted by the PERB based upon the results of the 2020 Experience Study conducted by Milliman, issued July 20, 2021. The assumptions and methods were selected in a manner consistent with current Actuarial Standards of Practice.



This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Public Employees Retirement Board
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Milliman prepared the following information that is presented in the *Actuarial Section* of the 2022 ACFR based on the December 31, 2021 Actuarial Valuation:

- Schedule of Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Schedules of Funding Progress by Rate Pool
- Solvency Test
- Analysis of Financial Experience
- Schedules of Funding Progress

We understand the *Actuarial Section* of the ACFR will also include summaries of the actuarial methods, actuarial assumptions, and plan provisions valued. These summaries are contained in the December 31, 2021 Actuarial Valuation.

Financial Reporting Under GASB 67 and GASB 74

Under GASB 67 and GASB 74, the required financial reporting schedules present information using a Measurement Date of the System's fiscal year end. The Total Pension Liability (under GASB 67) and Total OPEB Liability (under GASB 74) for the June 30, 2022 fiscal year end were determined based on the results of the December 31, 2020 Actuarial Valuation. The liability calculated at the actuarial valuation date was then adjusted to the Measurement Date using standard actuarial roll-forward procedures. The Total Pension Liability/Total OPEB Liability is compared to the Fiduciary Net Position as of the Measurement Date, as provided by PERS and measured on a fair market value of assets basis, to determine the Net Pension Liability (Asset) under GASB 67 and the Net OPEB Liability (Asset) under GASB 74.

Milliman prepared the following exhibits for GASB 67 to assist PERS in completing the required *Notes to the Financial Statements and Required Supplementary Information*:

- Net Pension Liability (Asset)
- Changes in Net Pension Liability (Asset)
- Sensitivity Analysis
- Schedule of Changes in Net Pension Liability (Asset) and Related Ratios
- Long Term Expected Rate of Return

These exhibits, along with a discussion of the actuarial basis underlying the results, are presented in our *GASB 67 Reporting for Fiscal Year End 2022* letter dated November 16, 2022.

Milliman prepared the following exhibits for GASB 74 to assist PERS in completing the required *Notes to the Financial Statements and Required Supplementary Information*:

- Net OPEB Liability (Asset)
- Changes in Net OPEB Liability (Asset)
- Sensitivity Analysis
- Schedule of Changes in Net OPEB Liability (Asset) and Related Ratios
- Long Term Expected Rate of Return



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Oregon Public Employees Retirement System
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These exhibits, along with a discussion of the actuarial basis underlying the results, are presented in our *GASB 74 Reporting for Fiscal Year End 2022* letter dated November 16, 2022. The first four exhibits listed above were provided separately for RHIA and RHIPA.

Funding Policy

The funding policy selected by the PERB is to adopt biennial contribution rates in accordance with the results of a "rate-setting" actuarial valuation performed using the assumptions and methods described in the associated actuarial valuation report. For example, the rates developed in the December 31, 2021 Actuarial Valuation were adopted by the PERB and established employer contributions for the July 1, 2023 to June 30, 2025 biennium. Contribution rates include funding the cost associated with new benefit accruals as well as amortizing any unfunded actuarial liability, determined using the market value of assets, over closed, layered amortization periods that vary from 10 to 20 years, according to the benefit program. In accordance with Senate Bill 1049, the unfunded actuarial liability for Tier One/Tier Two was reamortized over 22 years as of December 31, 2019. The contribution rate stabilization method (also known as the "rate collar") limits rate changes from one biennium to the next, in effect phasing in changes over multiple rate-setting periods if asset or liability experience causes a large movement in the actuarially calculated contribution rate prior to application of the rate collar.

All members hired prior to August 29, 2003, are covered under Chapter 238 and are collectively referred to as Tier One/Tier Two members. Their benefit costs are calculated using two experience sharing pool valuations and some independent employer valuations. All school districts pool their Tier One/Tier Two experience through the school district pool. State government and some local governments pool their Tier One/Tier Two experience through the State and Local Government Rate Pool (SLGRP). As of December 31, 2021, there are also 127 independent employers who do not pool their Tier One/Tier Two experience with the other employers except through the Benefits in Force Reserve, which pools the experience of Tier One/Tier Two members in payee status across all employers and all other Tier One/Tier Two pooling arrangements.

All members hired after August 28, 2003, are covered under Chapter 238A and are referred to as OPSRP members, except for those members who previously established membership under Chapter 238 and meet the statutory requirements to reinstate those benefits. Experience for Chapter 238A members is pooled across all employers regardless of their status under the Chapter 238 arrangements. Chapter 238 benefits and Chapter 238A benefits are parts of a single plan.

Finally, some employers made lump sum deposits in addition to their regularly scheduled contributions. These deposits are placed in a "side account" within the legally restricted pension trust and are used to offset a portion of future contribution requirements of the depositing employers via side account transfers. For financial reporting purposes, lump sum deposits are not considered as contributions in relation to the actuarially determined contribution. However,



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side accounts are included as assets in the Fiduciary Net Position. The Schedule of Funding Progress and Solvency Test also include side accounts as part of the Plan's assets.

Actuarial Basis

In preparing the valuation reports, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System. The December 31, 2020 and December 31, 2021 valuation results were developed using models that employ standard actuarial techniques for pension valuations.

The valuation reports are only an estimate of the System's financial condition as of a single date. They can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of the System's actuarially calculated contributions. While the valuations are based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in these reports due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The PERB has the final decision regarding the appropriateness of the assumptions and adopted them as indicated herein at its October 2021 public meeting.

Some of the actuarial computations presented in the valuation reports are for purposes of determining contribution rates for System employers. Other actuarial computations presented in the reports under GASB Statements No. 67, 68, 74, and 75 are for purposes of assisting the System and participating employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the reports have been made on a basis consistent with our understanding of the



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Public Employees Retirement Board
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 Page 5

System's funding policy and goals, the System benefit provisions as summarized in the reports, and GASB Statements No. 67, 68, 74, and 75. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in these reports. Accordingly, additional determinations may be needed for other purposes.

Milliman's work has been prepared exclusively for the Oregon Public Employees Retirement System for a specific and limited purpose. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. It is a complex, technical analysis that assumes a high level of knowledge concerning the System's operations, and uses the System's data, which Milliman has not audited. No third-party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the *Code of Professional Conduct and Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* published by the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Sincerely,


 Matthew R. Larrabee, FSA, EA, MAAA
 Principal and Consulting Actuary


 Scott D. Preppernau, FSA, EA, MAAA
 Principal and Consulting Actuary



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Actuarial Methods and Assumptions



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Tier One/Tier Two (including Retiree Healthcare)

Actuarial Methods and Valuation Procedures

In October 2021 the Board adopted the following actuarial methods and valuation procedures for the December 31, 2020 and 2021 actuarial valuations of PERS Tier One/Tier Two benefits.

Actuarial cost method

Entry Age Normal. Under the Entry Age Normal (EAN) cost method, each active member's **entry age present value of projected benefits** is allocated over the member's service from the member's date of entry until their assumed date of exit, taking into consideration expected future compensation increases. Thus, the total pension to which each member is expected to become entitled at retirement is broken down into units, each associated with a year of past or projected future credited service. Typically, when this method is introduced, there will be an initial liability for benefits credited for service prior to that date, and to the extent that the liability is not covered by assets of the plan, there is an unfunded accrued liability to be funded over a stipulated period in accordance with an amortization schedule.

A detailed description of the calculation follows:

- An individual member's **entry age present value of projected benefits** is the sum of the present value of the benefit described under the plan at each possible separation date, determined at the member's entry age using the projected compensation and service at each separation date.
- An individual member's **entry age present value of projected salaries** is the sum of the present value of the projected compensation over the member's working career associated with each possible future separation date, determined at the member's entry age.
- An individual member's **present value of projected benefits** is the sum of the present value of the benefit described under the plan at each possible separation date, determined at the valuation date using the projected compensation and service at each separation date.
- An individual member's **normal cost** for a certain year is the member's **entry age present value of projected benefits** divided by the member's **entry age present value of projected salaries** and multiplied by the member's projected compensation for the year following the valuation date.
- An individual member's **actuarial accrued liability** is the member's **present value of projected benefits** less the sum of the present value of the member's **normal costs** for each future year, determined at the valuation date using the projected compensation and service at each future year.
 - The plan's **normal cost** is the sum of the individual member normal costs, and the plan's **actuarial accrued liability** is the sum of the individual members' actuarial accrued liabilities.

Milliman Actuarial Valuation

Actuarial Methods and Assumptions
Tier One/Tier Two (including Retiree Healthcare)

<i>Tier One/Tier Two UAL amortization</i>	<p>The Tier One/Tier Two UAL amortization period was reset to 20 years as of December 31, 2013. Gains and losses between subsequent odd-year valuations were amortized as a level percentage of projected combined valuation payroll (Tier One/Tier Two plus OPSRP payroll) over a closed 20-year period from the valuation in which they are first recognized.</p> <p>Senate Bill 1049 was signed into law in June 2019 and required a one-time re-amortization of Tier One/Tier Two UAL over a closed 22-year period at the December 31, 2019 rate-setting actuarial valuation, which set actuarially determined contribution rates for the 2021-2023 biennium. Future Tier One/Tier Two UAL gains or losses will be amortized over 20 years. The closed period amortization under Senate Bill 1049 will continue to decline, and has 20 years remaining as of the December 31, 2021 rate-setting valuation.</p>
<i>Retiree Healthcare UAL amortization</i>	<p>The UAL for the Retiree Healthcare programs (RHIA and RHIPA) as of December 31, 2007 were amortized as a level percentage of projected combined valuation payroll (Tier One/Tier Two plus OPSRP payroll) over a closed 10-year period. When RHIA or RHIPA are less than 100% funded, gains and losses between subsequent odd-year valuations are amortized as a level percentage of combined valuation payroll over a closed 10-year period from the valuation in which they are first recognized.</p> <p>If RHIA or RHIPA are in actuarial surplus (over 100% funded), the surplus is amortized over a rolling 20-year period over Tier One/Tier Two payroll. The resulting negative UAL rate will offset the normal cost of the program, but not below 0.00%.</p>
<i>Asset valuation method</i>	<p>The actuarial value of assets equals the market value of assets, excluding the Contingency and Capital Preservation Reserves, and the Rate Guarantee Reserve when it is in positive surplus status.</p> <p>Market values are reported to Milliman by PERS. It is our understanding that select real estate and private equity investments are reported on a three-month lag basis. This valuation report does not attempt to quantify any effects of the reporting lag.</p>



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<i>Contribution rate stabilization method</i>	<p>The UAL Rate component for a rate pool (e.g., Tier One/Tier Two SLGRP, Tier One/Tier Two School Districts, OPSRP) is confined to a collared range based on the prior biennium's collared UAL Rate component (prior to consideration of side account offsets, SLGRP transition liability or surplus rates, pre-SLGRP liability rate charges or offsets, or member redirect offsets).</p> <p><u>Collar Width:</u> The rate pool's new UAL Rate component will generally not increase or decrease from the prior biennium's collared UAL Rate component by more than the following amount:</p> <ul style="list-style-type: none"> • Tier One/Tier Two SLGRP and Tier One/Tier Two School Districts Pool: 3% of payroll • OPSRP: 1% of payroll • Tier One/Tier Two rates for independent employers: greater of 4% of payroll or one-third of the difference between the collared and uncollared UAL Rate at the prior rate-setting valuation. In addition, the UAL Rate will not be allowed to be less than 0.00% of payroll for any Tier One/Tier Two independent employer with a funded status (excluding side accounts) less than 100%. <p><u>UAL Rate decrease restrictions:</u> The UAL Rate component for any rate pool will not decrease from the prior biennium's collared UAL Rate component if the pool's funded status (excluding side accounts) is 87% or lower; the allowable decrease will phase into the full collar width for rate pools between 87% and 90% funded.</p>
<i>Offset for Member Redirect Contributions</i>	<p>Under Senate Bill 1049, a portion of the 6% of pay member contribution otherwise made to the IAP is redirected to fund Tier One/Tier Two and OPSRP defined benefits beginning July 1, 2020. For Tier One/Tier Two members, the redirected amount is 2.50% of pay, and for OPSRP it is 0.75% of pay. Members with less than \$2,500 in monthly pay (indexed in future years) are exempt from the redirection. House Bill 2906 subsequently increased this amount to \$3,333 per month effective in 2022.</p> <p>For employer contribution rates shown in this valuation, member redirect contributions are assumed to offset total contribution rates. Reflecting the effect of the monthly pay level-based exemption noted above, the offset is assumed to be 2.40% of total payroll for Tier One/Tier Two and 0.85% of total payroll for OPSRP.</p>
<i>Allocation of Liability for Service Segments</i>	<p>For active Tier One/Tier Two members who have worked for multiple PERS employers over their career, the calculated actuarial accrued liability is allocated among the employers based on a weighted average of the Money Match methodology, which uses account balance, and the Full Formula methodology, which uses service. The allocation is 10% (0% for police & fire) based on account balance with each employer and 90% (100% for police & fire) based on service with each employer.</p> <p>The entire normal cost is allocated to the current employer.</p>
<i>Allocation of Benefits-In-Force (BIF) Reserve</i>	<p>The BIF reserve is allocated to each rate pool in proportion to the retiree liability attributable to the rate pool.</p>



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Milliman Actuarial Valuation
**Actuarial Methods and Assumptions
Tier One/Tier Two (including Retiree Healthcare)**

<i>Census Data</i>	<p>PERS staff provided the data on plan members and beneficiaries upon which this valuation is based. Milliman did not audit the data, but did review it for reasonableness and consistency with data provided for previous years, in accordance with Actuarial Standard of Practice No. 23.</p> <p>PERS staff assisted in resolving questions and inconsistencies discovered in the data review, and provided updated records or direction for adjusting data as needed.</p> <p>The final census data is expected to be sufficiently accurate and complete for purposes of the actuarial valuation, and we are not aware of any significant concerns or unresolved issues that would materially affect results.</p>
<i>Internal Revenue Code 415 Benefit Limits</i>	<p>Annual benefit limits under Internal Revenue Code 415 are not explicitly reflected in the valuation.</p> <p>In accordance with ORS 238.488, we understand that members whose benefits are restricted by IRC 415 benefit limits are paid the difference between the unrestricted benefit and the IRC 415-restricted benefit from the Public Employee Benefit Equalization Fund.</p>



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Economic Assumptions

The Board adopted the following economic assumptions for the December 31, 2020 and 2021 actuarial valuations. All assumptions were reviewed and adopted in conjunction with the 2020 Experience Study, published in July 2021. The assumption selection process and rationale is described in detail in that report.

<i>Investment return</i>	6.90% compounded annually
<i>Pre-2014 Interest crediting</i>	8.00% compounded annually on members' regular account balances 8.25% compounded annually on members' variable account balances
<i>Post-2013 Interest crediting</i>	6.90% compounded annually on members' regular account balances 6.90% compounded annually on members' variable account balances
<i>Inflation</i>	2.40% compounded annually
<i>Administrative expenses</i>	\$59.0 million per year is added to the total system normal cost and allocated between Tier One/Tier Two and OPSRP based on valuation payroll.
<i>Payroll growth</i>	3.40% compounded annually. This assumption represents the sum of the inflation assumption and a real wage growth assumption of 100 basis points.

Healthcare cost trend Healthcare cost trend rates are used to estimate increases in the RHIPA Maximum Subsidy. The healthcare cost trends are based on the Society of Actuaries (SOA) periodically updated report on long-term medical trends. These rates were developed reflecting the repeal of the Affordable Care Act excise tax by the Further Consolidated Appropriations Act passed in December 2019.

Given the substantial uncertainty regarding the impact of COVID-19 on plan costs, including whether the pandemic will increase or decrease costs during the term of our projections, we have chosen not to make an adjustment in the expected plan costs or in the trend assumptions. It is possible that the COVID-19 pandemic could have a material impact on the projected costs.

Year*	Rate	Year	Rate
2021	5.9%	2052 – 2060	4.7%
2022	5.5	2061 – 2064	4.6
2023	5.1	2065 – 2066	4.5
2024	5.0	2067	4.4
2025 – 2026	4.9	2068	4.3
2027	4.8	2069 – 2070	4.2
2028 – 2036	4.7	2071	4.1
2037 – 2045	4.8	2072 – 2073	4.0
2045 – 2049	4.9	2074+	3.9
2050 – 2051	4.8		

*For valuation purposes, the health cost trend rates are assumed to be applied at the beginning of the plan year.



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Demographic Assumptions

The Board adopted the following demographic assumptions for the December 31, 2020 and 2021 actuarial valuations. All assumptions were reviewed and adopted in conjunction with the 2020 Experience Study, published in July 2021. The study relied on data from an observation period of January 1, 2017 to December 31, 2020, with the exception of the merit scale assumption, which relied on data from 2012 through 2020 (with certain exclusions due to one-off events that are not expected to be indicative of future experience, as detailed in the 2020 Experience Study). Assumptions selected from the study represent an estimate of future experience based on relevant recent experience and reasonable expectations about the future.

Mortality

Healthy Retired Members and Beneficiaries

The following healthy annuitant mortality tables were first adopted in the December 31 valuation of the years shown.

Basic Table	Pub-2010 Healthy Retiree, Sex Distinct, Generational Projection with Unisex Social Security Data Scale	Valuation Year Adopted
School District male	Blend 80% Teachers and 20% General Employees, no set back	2020
Other General Service male*	General Employees, set back 12 months	2018
Police & Fire male	Public Safety, no set back	2018
School District female	Teachers, no set back	2018
Other General Service female**	General Employees, no set back	2018
Police & Fire female	Public Safety, set back 12 months	2018

* Including male beneficiaries of members of all classes

** Including female beneficiaries of members of all classes

Disabled Retired Members

The following disabled retiree mortality rates were first adopted for the December 31, 2018 actuarial valuation.

Basic Table	Pub-2010 Disabled Retiree, Sex Distinct, Generational Projection with Unisex Social Security Data Scale
Police & Fire male	Blended 50% Public Safety, 50% Non-Safety, no set back
Other General Service male	Non-Safety, set forward 24 months
Police & Fire female	Blended 50% Public Safety, 50% Non-Safety, no set back
Other General Service female	Non-Safety, set forward 12 months

Non-Annuitant Members

The following non-annuitant mortality tables were first adopted in the December 31 valuation of the years shown.

Basic Table	Pub-2010 Employee, Sex Distinct, Generational Projection with Unisex Social Security Data Scale	Valuation Year Adopted
School District male	125% of Employee table with same job category and set back as Healthy Retiree assumption	2020
Other General Service male	115% of Employee table with same job category and set back as Healthy Retiree assumption	2018
Police & Fire male	100% of Employee table with same job category and set back as Healthy Retiree assumption	2018
School District female	100% of Employee table with same job category and set back as Healthy Retiree assumption	2018
Other General Service female	125% of Employee table with same job category and set back as Healthy Retiree assumption	2018
Police & Fire female	100% of Employee table with same job category and set back as Healthy Retiree assumption	2018

Retirement Assumptions

The retirement assumptions used in the actuarial valuation include the following:

- Retirement from active status/dormant status
- Probability a member will elect a lump sum option at retirement
- Percentage of members who elect to purchase credited service at retirement.

Rates of Retirement from Active Status

The following retirement rate assumptions were first adopted in the December 31, 2020 valuation.

Age	Police & Fire			General Service			School Districts			Judges
	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs	
Less than 50						15.0%			25.0%	
50	1.5%	3.0%	32.0%			15.0%			25.0%	
51	1.5%	3.0%	27.0%			15.0%			25.0%	
52	1.5%	3.0%	27.0%			15.0%			25.0%	
53	1.5%	3.0%	27.0%			15.0%			25.0%	
54	1.5%	3.5%	27.0%			15.0%			25.0%	
55	3.0%	15.5%	27.0%	1.5%	2.5%	15.0%	1.5%	3.5%	25.0%	
56	3.0%	10.0%	27.0%	1.5%	2.5%	15.0%	1.5%	3.5%	25.0%	
57	3.0%	10.0%	27.0%	1.5%	2.5%	15.0%	1.5%	3.5%	25.0%	
58	6.0%	10.0%	27.0%	1.5%	9.0%	21.0%	1.5%	11.0%	27.5%	
59	6.0%	10.0%	27.0%	3.5%	9.0%	21.0%	4.5%	11.0%	27.5%	



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Milliman Actuarial Valuation

Actuarial Methods and Assumptions
Tier One/Tier Two (including Retiree Healthcare)

Age	Police & Fire			General Service			School Districts			Judges
	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs	
60	6.0%	12.0%	27.0%	6.0%	11.0%	21.0%	6.5%	12.5%	27.5%	12.0%
61	6.0%	14.0%	27.0%	6.0%	11.0%	21.0%	6.5%	12.5%	27.5%	12.0%
62	15.0%	25.0%	38.0%	13.0%	19.5%	28.5%	15.0%	21.0%	34.0%	12.0%
63	15.0%	15.0%	31.0%	11.5%	16.5%	23.0%	13.0%	19.5%	27.5%	12.0%
64	15.0%	15.0%	31.0%	12.5%	16.5%	23.0%	13.0%	19.5%	27.5%	12.0%
65	40.0%	40.0%	50.0%	19.5%	28.0%	37.5%	25.5%	33.5%	45.0%	12.0%
66	40.0%	40.0%	50.0%	27.5%	36.0%	40.5%	23.0%	36.5%	45.0%	12.0%
67	40.0%	40.0%	50.0%	22.5%	26.5%	34.0%	21.0%	34.5%	38.0%	20.0%
68	40.0%	40.0%	50.0%	19.5%	26.5%	28.5%	21.0%	28.0%	28.5%	20.0%
69	40.0%	40.0%	50.0%	19.5%	26.5%	28.5%	21.0%	28.0%	28.5%	20.0%
70	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	28.0%	28.5%	30.0%
71	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	28.0%	28.5%	30.0%
72	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	28.0%	28.5%	30.0%
73	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	28.0%	28.5%	30.0%
74	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	28.0%	28.5%	30.0%
75 +	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Retirement from Dormant Status

Dormant members are assumed to retire at Normal Retirement Age (age 58 for Tier One, age 60 for Tier Two, age 60 for Judges, and age 55 for Police & Fire) or at the first unreduced retirement age (30 years of service, or age 50 with 25 years of service for Police & Fire).

Lump Sum Option at Retirement

Members retiring may elect to receive a full or partial lump sum at retirement. The probability that a retiring member will elect a lump sum at retirement is summarized in the table below. Due to a continued decline in the number of members selection a total lump sum, this assumption was reduced to zero as part of the rates shown below, which were adopted effective December 31, 2020.

Lump Sum Option at Retirement	
Partial Lump Sum:	2.0% for all years
Total Lump Sum:	0.0% for all years
No Lump Sum:	98.0% for all years

Purchase of Credited Service at Retirement

The following percentages of members are assumed to purchase service credit at time of retirement for the six-month waiting period that occurs prior to establishing membership in the system. These rates were first adopted effective December 31, 2020.

Purchase of Credited Service at Retirement	
Money Match Retirements:	0%
Non-Money Match Retirements:	75%



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The cost of the service purchase is estimated based on assumed salary and contribution rates at entry age.

State Judiciary Member Plan Election

All State Judiciary members are assumed to elect to retire under the provisions of Plan B.

Disability Assumptions

There are two disability assumptions used in the valuation - duty disability and ordinary (non-duty) disability. Duty disability rates are separated between Police & Fire and General Service, while ordinary disability is the same for all members. The rates for ordinary disability and for duty disability for General Service were first adopted effective December 31, 2020. The rates for duty disability for Police & Fire were first adopted effective December 31, 2012.

	Percentage of the 1985 Disability Class 1 Rates
Duty Disability Police & Fire	20%
Duty Disability General Service	0.7%
Ordinary Disability	25% with 0.16% cap

Ordinary disability rates are not applied until the minimum service requirement for non-duty disability benefits is met. Disability rates continue to be applied after retirement eligibility, but not after Normal Retirement Age.

Termination Assumptions

The General Service Female termination assumption was first adopted effective December 31, 2020. The General Service Male termination assumption was first adopted effective December 31, 2018. The School District termination assumptions were first adopted effective December 31, 2016. The Police & Fire termination assumption was first adopted effective December 31, 2014.

Sample termination rates are shown for each group below:

Duration from Hire Date	School District Male	School District Female	General Service Male	General Service Female	Police & Fire
0	16.63%	13.50%	15.00%	15.00%	10.00%
1	14.25%	12.50%	12.50%	14.00%	5.97%
5	8.86%	7.13%	7.19%	7.23%	3.31%
10	3.31%	3.85%	4.13%	4.77%	2.23%
15	2.30%	2.68%	2.93%	3.43%	1.50%
20	1.62%	1.95%	2.08%	2.47%	1.01%
25	1.20%	1.50%	1.47%	1.78%	0.80%
30+	1.20%	1.50%	1.40%	1.40%	0.80%

Termination rates are not applied after a member reaches retirement eligibility. For a complete table of rates, please refer to the 2020 Experience Study report for the System, published in July 2021.



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Milliman Actuarial Valuation

Actuarial Methods and Assumptions
Tier One/Tier Two (including Retiree Healthcare)

Oregon Residency Post-Retirement

For purposes of determining eligibility for SB 856/HB 3349 benefit adjustments, 85% of retirees are assumed to remain Oregon residents after retirement. This assumption was first adopted effective December 31, 2012.

Police & Fire Unit Purchase

Police & Fire members retiring from active service prior to age 65 are assumed to purchase additional benefit units at an estimated employer matching cost of \$4,000.

Salary Increase Assumptions

The salary increase assumptions reflected in the actuarial valuation include:

- Merit scale increases in addition to the payroll growth increase
- Unused Sick Leave adjustments
- Vacation Pay adjustments

Merit Scale Increases

Merit scale increases are based on duration of service for the following groups with sample rates shown in the following table. These rates were first adopted effective December 31, 2020.

Duration	School District	Other General Service	Police & Fire
0	4.15%	4.08%	5.13%
1	3.92%	3.73%	4.59%
5	2.98%	2.60%	2.87%
10	1.79%	1.52%	1.58%
15	0.72%	0.79%	0.98%
20	-0.11%	0.38%	0.79%
25	-0.55%	0.19%	0.72%
30+	-0.59%	0.18%	0.50%

The assumed merit scale increase for active State Judiciary members is 0.0%.

For a complete table of rates, please refer to the 2020 Experience Study for the System, published in July 2021.

Unused Sick Leave

Members covered by the provision allowing unused sick leave to be used to increase final average salary at time of retirement are assumed to receive increases in their final average salary in accordance with the table below. This adjustment is not applied to disability benefits. Effective dates for the current assumption are shown in the table.

Unused Sick Leave	Valuation year adopted
Actives	
• State General Service Male	8.25% 2020



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Unused Sick Leave		Valuation year adopted
• State General Service Female	5.00%	2020
• School District Male	9.50%	2020
• School District Female	6.50%	2020
• Local General Service Male	7.25%	2020
• Local General Service Female	4.50%	2020
• State Police & Fire	4.25%	2020
• Local Police & Fire	7.50%	2020
Dormant Members	5.00%	2020

Vacation Pay

Members eligible to include a lump sum payment of unused vacation pay in their final average salary calculation at time of retirement are assumed to receive increases in their final average salary in accordance with the table below. This adjustment is not applied to disability benefits. These rates were adopted December 31, 2020, except the school district assumption which was adopted effective December 31, 2012 and the state police & fire assumption, which was adopted effective December 31, 2018.

Vacation Pay	
Tier One	
• State General Service	2.50%
• School District	0.25%
• Local General Service	3.50%
• State Police & Fire	2.75%
• Local Police & Fire	4.75%
Tier Two	
	0.00%

Retiree Healthcare Participation

The following percentages of eligible retiring members are assumed to elect RHIPA and RHIA coverage:

Retiree Healthcare Participation	
RHIPA	
• 8 – 9 years of service	10.0%
• 10 – 14 years of service	10.0%
• 15 – 19 years of service	11.0%
• 20 – 24 years of service	14.0%
• 25 – 29 years of service	22.0%
• 30+ years of service	27.0%
RHIA	
• Healthy Retired	27.5%
• Disabled Retired	15.0%

The participations rates were adopted December 31, 2020.



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Spouse Assumptions

Non-annuitant death benefits are valued assuming all members are married. Future participants in RHIA and RHIPA are assumed to have eligible spouses. For these purposes, the spouse is assumed to be three years younger than a male member or three years older than a female member.

Actuarial Equivalence Assumptions

Early retirement factors and optional form conversion factors are assumed to remain level in all future years.

For members with pop-up annuities, the future amount payable if the spouse predeceases the member is estimated based on an assumed 0.90 optional form conversion factor for 100% contingent annuities and an assumed 0.94 optional form conversion factor for 50% contingent annuities.



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OPSRP

Most of the methods and assumptions adopted for the OPSRP valuation are the same as those used for Tier One/Tier Two. The methods and assumptions that differ for OPSRP are summarized below. The Board adopted the following methods, procedures and assumptions for the December 31, 2020 and December 31, 2021 actuarial valuations.

Actuarial Methods and Valuation Procedures

<i>OPSRP UAL amortization</i>	The UAL as of December 31, 2007 is amortized as a level percentage of projected combined valuation payroll (Tier One/Tier Two plus OPSRP payroll) over a closed period 16 year period. Gains and losses between subsequent odd-year valuations are amortized as a level percentage of combined valuation payroll over 16 years from the valuation in which they are first recognized.
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Economic Assumptions

<i>Administrative expenses</i>	\$59.0 million per year is added to the total system normal cost and allocated between Tier One/Tier Two and OPSRP based on valuation payroll.
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Demographic Assumptions

Rates of Retirement from Active Status

Age	Police & Fire			General Service			School Districts		
	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs
50	0.5%	1.5%	5.5%						
51	0.5%	1.5%	5.5%						
52	0.5%	1.5%	5.5%						
53	0.5%	1.5%	27.0%						
54	0.5%	1.5%	27.0%						
55	2.0%	5.0%	27.0%	1.0%	2.5%	5.0%	0.5%	2.5%	5.0%
56	2.0%	5.0%	27.0%	1.0%	2.5%	5.0%	0.5%	2.5%	5.0%
57	2.0%	5.0%	27.0%	1.0%	2.5%	7.5%	1.0%	2.5%	7.5%
58	5.0%	5.0%	27.0%	1.5%	3.0%	30.0%	1.5%	3.0%	30.0%
59	5.0%	5.0%	27.0%	2.0%	3.0%	25.0%	1.5%	3.0%	25.0%
60	5.0%	15.0%	27.0%	2.5%	3.75%	20.0%	2.5%	3.75%	20.0%
61	5.0%	8.5%	27.0%	2.5%	5.0%	20.0%	2.5%	5.0%	20.0%
62	10.0%	25.0%	38.0%	6.5%	12.0%	30.0%	6.0%	12.0%	30.0%
63	7.0%	15.0%	31.0%	6.5%	10.0%	20.0%	6.0%	10.0%	20.0%
64	7.0%	15.0%	31.0%	6.5%	10.0%	20.0%	6.0%	10.0%	20.0%
65	7.0%	35.0%	40.0%	15.5%	35.0%	20.0%	12.5%	35.0%	20.0%
66	7.0%	35.0%	40.0%	18.5%	33.0%	20.0%	12.5%	33.0%	20.0%
67	7.0%	35.0%	40.0%	17.0%	22.0%	30.0%	11.0%	22.0%	30.0%
68	7.0%	35.0%	40.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%



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Milliman Actuarial Valuation

Actuarial Methods and Assumptions
OPSRP

Age	Police & Fire			General Service			School Districts		
	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs
69	7.0%	35.0%	40.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
70	100.0%	100.0%	100.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
71	100.0%	100.0%	100.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
72	100.0%	100.0%	100.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
73	100.0%	100.0%	100.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
74	100.0%	100.0%	100.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
75 +	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Retirement from Dormant Status

Dormant members are assumed to retire at their Normal Retirement Age.

Disability Assumptions

Assumed disability rates are not applied to OPSRP members after they reach Normal Retirement Age.

Cost of living increases for the adjusted salary used to calculate retirement benefits for disabled OPSRP members are estimated based on the valuation inflation assumption.



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Changes in Actuarial Methods and Assumptions — Tier One/Tier Two and OPSRP

A summary of key changes implemented since the December 31, 2020 valuation are described briefly below.

Changes in Actuarial Methods and Allocation Procedures

There were no changes to actuarial methods and procedures since the December 31, 2020 actuarial valuation.

Changes in Economic Assumptions

There were no changes to economic assumptions since the December 31, 2020 actuarial valuation.

Changes in Demographic Assumptions

There were no changes to demographic assumptions since the December 31, 2020 actuarial valuation.



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Accounting / ACFR Exhibits



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Accounting/ACFR Exhibits

The following information as of December 31, 2021 has been prepared and provided to Oregon PERS for inclusion in the Actuarial Section of the 2022 Annual Comprehensive Financial Report (ACFR):

- Schedule of Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Schedules of Funding Progress by Rate Pool
- Solvency Test
- Analysis of Financial Experience
- Schedules of Funding Progress

These exhibits do not reflect GASB Statements No. 74 and 75, which were issued by GASB in June 2015 to replace Statements No. 43 and 45, and govern financial reporting for postemployment benefits other than pensions. GASB 74 governs plan reporting effective for fiscal years beginning after June 15, 2016, while GASB 75 governs employer reporting for fiscal years beginning after June 15, 2017. Milliman provided results for Oregon PERS under GASB 74 and 75 determined as of a June 30, 2021 measurement date in letters dated November 23, 2021 and March 1, 2022, respectively. The results for a measurement date of June 30, 2022 will be provided separately.

These exhibits do not reflect GASB Statements No. 67 and 68, issued by GASB in June 2012 to replace Statements No. 25 and 27. GASB 67 governs plan financial reporting effective for fiscal years beginning after June 15, 2013, while GASB 68 governs employer financial reporting for fiscal years beginning after June 15, 2014. Milliman provided results for Oregon PERS under GASB 67 and 68 determined as of a June 30, 2021 measurement date in letters dated November 19, 2021 and March 1, 2022, respectively. The results for a measurement date of June 30, 2022 will be provided separately.

Some employers have made supplemental deposits in addition to their regularly scheduled contributions. These deposits are placed in a side account within the pension trust and used to offset future contribution requirements of that employer. The Schedules of Funding Progress and Solvency Test include side accounts as part of the Plan's assets since those amounts are in a restricted trust available exclusively for the benefit of plan members.

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist Oregon PERS in completing its financial statements, but any accounting determination should be reviewed by your auditor.

The exhibits are provided on the following pages.



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Actuarial Schedules

Schedule of Active Member Valuation Data

Valuation Date	Count	Annual Payroll (Thousands)	Average Annual Pay	% Increase in Average Pay	Number of Participating Employers ¹	
12/31/1993	137,513	\$4,466,797	\$32,483		N/A	
12/31/1995	141,471	\$4,848,058	\$34,269	5.5%	N/A	
12/31/1997	143,194	\$5,161,562	\$36,045	5.2%	N/A	
12/31/1999	151,262	\$5,676,606	\$37,528	4.1%	N/A	
12/31/2000	156,869	\$6,195,862	\$39,497	5.2%	N/A	
12/31/2001	160,477	\$6,520,225	\$40,630	2.9%	N/A	Old Basis
12/31/2001	160,477	\$6,253,965	\$38,971	—	N/A	New Basis ²
12/31/2002	159,287	\$6,383,475	\$40,075	2.8%	N/A	
12/31/2003	153,723	\$6,248,550	\$40,648	1.4%	N/A	
12/31/2004	142,635	\$6,306,447	\$44,214	8.8%	806	
12/31/2005 ³	156,501	\$6,791,891	\$43,398	(1.8%)	810	
12/31/2006	163,261	\$7,326,798	\$44,878	3.4%	758	
12/31/2007	167,023	\$7,721,819	\$46,232	3.0%	760	
12/31/2008	170,569	\$8,130,136	\$47,665	3.1%	766	
12/31/2009	178,606	\$8,512,192	\$47,659	(0.0%)	776	
12/31/2010	193,569	\$8,750,064	\$45,204	(5.2%)	787	
12/31/2011	170,972	\$8,550,511	\$50,011	10.6%	791	
12/31/2012	167,103	\$8,590,879	\$51,411	2.8%	798	
12/31/2013	162,185	\$8,671,835	\$53,469	4.0%	799	
12/31/2014	164,859	\$9,115,767	\$55,294	3.4%	802	
12/31/2015	168,177	\$9,544,132	\$56,751	2.6%	804	
12/31/2016	172,483	\$9,872,557	\$57,238	0.9%	805	
12/31/2017	173,002	\$10,098,889	\$58,374	2.0%	802	
12/31/2018	176,763	\$10,851,980	\$61,393	5.2%	798	
12/31/2019	180,757	\$11,533,740	\$63,808	3.9%	802	
12/31/2020	180,685	\$12,042,674	\$66,650	4.5%	797	
12/31/2021	177,739	\$12,684,124	\$71,364	7.1%	798	

¹ Effective in 2006, participating employers are defined for this purpose as any employer with covered payroll during the prior year. In prior years, employers with liabilities but without covered payroll were included as well.

² Effective in 2001, the Annual Payroll excludes the member pick-up, if any.

³ Effective with the 12/31/2005 valuation, OPSRP members and payroll are included.



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Actuarial Schedules

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Annual Allowances are shown in thousands.

Valuation Date	Added to Rolls		Removed from Rolls		Rolls - End of Year		% Increase in Annual Allowances ²	Average Annual Allowances
	Count	Annual Allowances ¹	Count	Annual Allowances	Count	Annual Allowances		
12/31/1993					60,841	\$564,341	27.6%	\$9,278
12/31/1995					64,798	\$700,171	24.1%	\$10,808
12/31/1997					69,624	\$919,038	31.3%	\$13,200
12/31/1999					82,819	\$1,299,380	41.4%	\$15,689
12/31/2000					82,458	\$1,385,556	6.6%	\$16,803
12/31/2001					85,216	\$1,514,491	9.3%	\$17,772
12/31/2002					89,482	\$1,722,885	13.8%	\$19,254
12/31/2003					97,777	\$2,040,533	8.4%	\$20,889
12/31/2004 ³	6,754	\$149,474	2,863	\$35,151	101,688	\$2,154,856	5.6%	\$21,195
12/31/2005 ³	4,472	\$149,127	3,217	\$36,784	102,923	\$2,267,198	5.2%	\$22,028
12/31/2006 ³	5,060	\$151,240	3,263	\$39,735	104,720	\$2,378,704	4.9%	\$22,715
12/31/2007 ³	5,385	\$183,232	3,304	\$40,590	106,801	\$2,521,345	6.0%	\$23,608
12/31/2008 ³	5,963	\$171,484	3,626	\$47,062	109,138	\$2,645,767	4.9%	\$24,242
12/31/2009 ³	6,377	\$226,713	3,374	\$46,228	112,141	\$2,826,252	6.8%	\$25,203
12/31/2010 ³	6,359	\$217,424	3,512	\$51,627	114,988	\$2,992,048	5.9%	\$26,021
12/31/2011 ³	8,715	\$282,098	3,679	\$55,633	120,024	\$3,218,514	7.6%	\$26,816
12/31/2012 ³	7,023	\$235,917	4,875	\$59,353	122,172	\$3,395,079	5.5%	\$27,789
12/31/2013	9,724	\$307,551	3,644	\$66,607	128,252	\$3,636,023	7.1%	\$28,351
12/31/2014 ⁴	6,910	\$235,250	3,524	\$66,621	131,638	\$3,804,651	4.6%	\$28,902
12/31/2015 ⁴	8,586	\$304,818	3,781	\$73,305	136,423	\$4,036,165	6.1%	\$29,586
12/31/2016 ⁴	6,413	\$242,372	3,931	\$80,903	138,905	\$4,197,633	4.0%	\$30,219
12/31/2017 ⁴	10,075	\$385,197	3,878	\$83,921	145,102	\$4,498,910	7.2%	\$31,005
12/31/2018	7,856	\$297,542	3,933	\$90,107	149,025	\$4,706,345	4.6%	\$31,581
12/31/2019	8,200	\$322,057	4,124	\$95,486	153,101	\$4,932,915	4.8%	\$32,220
12/31/2020	7,747	\$320,438	4,587	\$112,806	156,261	\$5,140,547	4.2%	\$32,897
12/31/2021	8,264	\$337,090	4,837	\$125,758	159,688	\$5,351,880	4.1%	\$33,515

¹ Additions to annual allowances reflect the combined effects of new retirements and COLA increases since the previous valuation date.

² Since last valuation date.

³ Annual allowances reflect estimated adjustments to retiree benefits due to the implementation of the Strunk v. PERB, et al. and City of Eugene v. State of Oregon, PERB, et al. decisions.

⁴ Annual allowances reflect estimated adjustments to retiree benefits for the Moro v. State of Oregon decision for records that were not already adjusted in the data provided.



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Milliman Actuarial Valuation

Accounting/ACFR Exhibits

Actuarial Schedules

Schedule of Funding Progress by Rate Pool

The liabilities and assets resulting from the last six actuarial valuations are as follows (amounts in millions)

Actuarial Valuation Date	Actuarial Value of Assets ^{1,2} (a)	Actuarial Accrued Liability (AAL) ² (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll ³ (c)	UAAL as a % of Covered Payroll ((b-a)/c)
Tier One/Tier Two State & Local Government Rate Pool						
12/31/2016	\$30,417.6	\$40,351.3	\$9,933.7	75.4%	\$2,546.7	390.1%
12/31/2017 ⁴	\$33,366.0	\$42,150.7	\$8,784.7	79.2%	\$2,410.6	364.4%
12/31/2018	\$31,798.9	\$43,149.3	\$11,350.4	73.7%	\$2,299.5	493.6%
12/31/2019 ⁴	\$34,060.0	\$44,122.1	\$10,062.1	77.2%	\$2,183.5	460.8%
12/31/2020	\$34,408.2	\$46,382.2	\$11,974.0	74.2%	\$2,089.0	573.2%
12/31/2021 ⁴	\$39,133.0	\$47,155.1	\$8,022.1	83.0%	\$1,981.7	404.8%
Tier One/Tier Two School District Rate Pool						
12/31/2016	\$22,870.2	\$29,152.2	\$6,282.0	78.5%	\$1,532.7	409.9%
12/31/2017	\$24,934.4	\$29,677.4	\$4,743.1	84.0%	\$1,443.7	328.5%
12/31/2018	\$23,557.9	\$29,898.4	\$6,340.6	78.8%	\$1,401.2	452.5%
12/31/2019	\$25,091.5	\$30,274.5	\$5,183.0	82.9%	\$1,330.2	389.6%
12/31/2020	\$25,345.4	\$31,486.0	\$6,140.6	80.5%	\$1,250.4	491.1%
12/31/2021	\$29,890.8	\$31,865.4	\$1,974.7	93.8%	\$1,216.3	162.3%
Tier One/Tier Two Independent Employers and Judiciary						
12/31/2016	\$4,856.6	\$6,690.8	\$1,834.3	72.6%	\$437.3	419.5%
12/31/2017 ⁴	\$5,018.2	\$6,536.3	\$1,518.1	76.8%	\$392.6	386.7%
12/31/2018	\$4,756.2	\$6,736.3	\$1,980.1	70.6%	\$375.4	527.5%
12/31/2019 ⁴	\$5,061.3	\$6,916.0	\$1,854.7	73.2%	\$360.3	514.8%
12/31/2020	\$5,155.0	\$7,373.8	\$2,218.8	69.9%	\$347.9	637.8%
12/31/2021 ⁴	\$5,807.6	\$7,528.6	\$1,720.9	77.1%	\$320.8	536.5%
OPSRP Rate Pool						
12/31/2016	\$3,021.4	\$4,717.0	\$1,695.6	64.1%	\$5,355.8	31.7%
12/31/2017	\$4,116.5	\$5,634.7	\$1,518.2	73.1%	\$5,852.0	25.9%
12/31/2018	\$4,783.0	\$6,738.0	\$1,955.0	71.0%	\$6,775.9	28.9%
12/31/2019	\$6,190.4	\$8,082.2	\$1,891.8	76.6%	\$7,659.8	24.7%
12/31/2020	\$7,548.8	\$10,008.1	\$2,459.3	75.4%	\$8,355.4	29.4%
12/31/2021	\$10,251.2	\$11,806.2	\$1,555.0	86.8%	\$9,165.3	17.0%
Postemployment Healthcare Benefits - Retirement Health Insurance Account						
12/31/2016	\$465.0	\$463.7	(\$1.3)	100.3%	\$4,516.7	(0.0%)
12/31/2017	\$553.3	\$437.6	(\$115.7)	126.4%	\$4,246.9	(2.7%)
12/31/2018	\$570.7	\$411.7	(\$159.1)	138.6%	\$4,076.1	(3.9%)
12/31/2019	\$644.1	\$403.9	(\$240.3)	159.5%	\$3,873.9	(6.2%)
12/31/2020	\$660.2	\$383.6	(\$276.6)	172.1%	\$3,687.3	(7.5%)
12/31/2021	\$763.2	\$369.2	(\$394.0)	206.7%	\$3,518.8	(11.2%)
Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account						
12/31/2016	\$19.1	\$67.9	\$48.8	28.1%	\$1,276.0	3.8%
12/31/2017	\$29.8	\$69.4	\$39.5	43.0%	\$1,212.2	3.3%
12/31/2018	\$38.5	\$62.7	\$24.3	61.3%	\$1,159.5	2.1%
12/31/2019	\$51.9	\$59.3	\$7.4	87.5%	\$1,120.6	0.7%
12/31/2020	\$63.6	\$48.0	(\$15.6)	132.6%	\$1,091.8	(1.4%)
12/31/2021	\$82.9	\$45.9	(\$37.0)	180.4%	\$1,053.3	(3.5%)

¹ Side account assets are included with Tier One/Tier Two assets.

² Excludes effect of Multnomah Fire District (net UAAL of \$127 million as of 12/31/2021).

³ Covered payroll shown is for members of the rate pool benefiting from the specified program. For example, Tier One/Tier Two School District payroll is only payroll for Tier One/Tier Two members and excludes OPSRP. However, UAAL is amortized using combined Tier One/Tier Two and OPSRP payroll.

⁴ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective January 1 following the valuation date.



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Actuarial Schedules

Solvency Test

Pension and Retiree Healthcare Plans Combined

(dollar amounts in millions)

The schedule below shows results from the defined benefit pension plans and retiree healthcare plans on a consolidated basis. Results are also shown separately for each program: Tier One/Tier Two, OPSRP, and retiree healthcare. Note that the defined benefit pension plan constitutes over 99% of the consolidated assets and liabilities.

Valuation Date ²	Actuarial Accrued Liability ¹			Valuation Assets ^{1,3}	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)		(1)	(2)	(3)
	12/31/2012 ⁴	\$7,704.9	\$38,759.3		\$16,473.1	\$55,080.1	100%
12/31/2013 ⁵	\$7,120.1	\$39,531.5	\$16,476.8	\$60,372.9	100%	100%	83%
12/31/2014 ⁶	\$6,950.4	\$46,576.7	\$20,470.8	\$61,798.3	100%	100%	40%
12/31/2015 ⁵	\$6,476.8	\$49,158.7	\$21,094.5	\$60,430.6	100%	100%	23%
12/31/2016	\$6,168.1	\$52,232.7	\$23,101.0	\$61,543.2	100%	100%	14%
12/31/2017 ⁵	\$5,585.9	\$55,636.9	\$23,340.3	\$67,909.2	100%	100%	29%
12/31/2018	\$5,153.6	\$57,297.7	\$24,597.8	\$65,411.5	100%	100%	12%
12/31/2019 ⁵	\$4,907.4	\$59,461.0	\$25,540.5	\$71,008.3	100%	100%	26%
12/31/2020 ⁷	\$4,583.7	\$63,068.9	\$28,079.3	\$73,102.1	100%	100%	19%
12/31/2021	\$4,557.6	\$64,992.6	\$29,266.3	\$85,847.4	100%	100%	56%

¹ Includes effect of Multnomah Fire District (net UAAL of \$127 million as of 12/31/2021).

² An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.

³ Includes the value of UAL Lump Sum Side Accounts.

⁴ The 12/31/2012 valuation reflects the benefit changes enacted by the 2013 Oregon Legislature in Senate Bills 622 and 661, as well as a change in cost method to Entry Age Normal.

⁵ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective January 1 following the valuation date.

⁶ The 12/31/2014 valuation reflects benefit changes from the Oregon Supreme Court's ruling in *Moro v. State of Oregon*, which overturned portions of Senate Bills 622 and 661.

⁷ Results for 12/31/2020 and later include Employee Pension Stability Accounts (EPSA) balances as member contributions.



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Actuarial Schedules

Solvency Test

Tier One/Tier Two Pension

(dollar amounts in millions)

Valuation Date ²	Actuarial Accrued Liability ¹			Valuation Assets ^{1,3}	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions	Retired Members and Beneficiaries	Other Members		(1)	(2)	(3)
	(1)	(2)	(3)				
12/31/2012 ⁴	\$7,704.9	\$36,377.3	\$14,527.4	\$53,594.0	100%	100%	65%
12/31/2013 ⁵	\$7,120.1	\$39,116.2	\$14,114.1	\$58,384.0	100%	100%	86%
12/31/2014 ⁶	\$6,950.4	\$46,113.5	\$17,331.0	\$59,370.6	100%	100%	36%
12/31/2015 ⁵	\$6,476.8	\$48,641.5	\$17,335.7	\$57,611.0	100%	100%	14%
12/31/2016	\$6,168.1	\$51,655.5	\$18,429.6	\$58,037.6	100%	100%	1%
12/31/2017 ⁵	\$5,585.9	\$54,967.4	\$17,868.1	\$63,209.7	100%	100%	15%
12/31/2018	\$5,153.6	\$56,534.9	\$18,148.3	\$60,019.3	100%	97%	0%
12/31/2019 ⁵	\$4,907.4	\$58,567.8	\$17,888.4	\$64,121.8	100%	100%	4%
12/31/2020 ⁷	\$4,557.6	\$62,012.8	\$18,721.9	\$64,829.5	100%	97%	0%
12/31/2021	\$4,446.8	\$63,723.1	\$18,425.2	\$74,750.1	100%	100%	36%

¹ Includes effect of Multnomah Fire District (net UAAL of \$127 million as of 12/31/2021).² An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.³ Includes the value of UAL Lump Sum Side Accounts.⁴ The 12/31/2012 valuation reflects the benefit changes enacted by the 2013 Oregon Legislature in Senate Bills 622 and 661, as well as a change in cost method to Entry Age Normal.⁵ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective January 1 following the valuation date.⁶ The 12/31/2014 valuation reflects benefit changes from the Oregon Supreme Court's ruling in *Moro v. State of Oregon*, which overturned portions of Senate Bills 622 and 661.⁷ Results for 12/31/2020 and later include Employee Pension Stability Accounts (EPSA) balances as member contributions.

OPSRP Pension

(dollar amounts in millions)

Valuation Date ¹	Actuarial Accrued Liability			Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions	Retired Members and Beneficiaries	Other Members		(1)	(2)	(3)
	(1)	(2)	(3)				
12/31/2012 ²	\$0.0	\$28.6	\$1,766.9	\$1,190.0	100%	100%	68%
12/31/2013	\$0.0	\$51.2	\$2,192.1	\$1,630.2	100%	100%	72%
12/31/2014 ³	\$0.0	\$92.4	\$2,971.6	\$2,024.6	100%	100%	65%
12/31/2015	\$0.0	\$144.6	\$3,567.9	\$2,389.1	100%	100%	62%
12/31/2016	\$0.0	\$201.1	\$4,515.9	\$3,021.4	100%	100%	62%
12/31/2017	\$0.0	\$310.1	\$5,324.5	\$4,116.5	100%	100%	71%
12/31/2018	\$0.0	\$419.0	\$6,318.9	\$4,783.0	100%	100%	69%
12/31/2019	\$0.0	\$554.3	\$7,527.9	\$6,190.4	100%	100%	75%
12/31/2020 ⁴	\$26.1	\$726.1	\$9,255.9	\$7,548.8	100%	100%	73%
12/31/2021	\$110.8	\$950.3	\$10,745.1	\$10,251.2	100%	100%	86%

¹ An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.² The 12/31/2012 valuation reflects the benefit changes enacted by the 2013 Oregon Legislature in Senate Bills 622 and 661, as well as a change in cost method to Entry Age Normal.³ The 12/31/2014 valuation reflects benefit changes from the Oregon Supreme Court's ruling in *Moro v. State of Oregon*, which overturned portions of Senate Bills 622 and 661.⁴ Results for 12/31/2020 and later include Employee Pension Stability Accounts (EPSA) balances as member contributions.

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Retiree Healthcare (RHIA and RHIPA)

(dollar amounts in millions)

Retiree Health Insurance Account (RHIA)							
Valuation Date ¹	Actuarial Accrued Liability			Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions	Retired Members and Beneficiaries	Other Members		(1)	(2)	(3)
	(1)	(2)	(3)				
12/31/2012 ²	\$0.0	\$338.3	\$133.5	\$291.6	100%	86%	0%
12/31/2013	\$0.0	\$348.0	\$125.6	\$353.5	100%	100%	4%
12/31/2014	\$0.0	\$355.1	\$113.3	\$395.9	100%	100%	36%
12/31/2015	\$0.0	\$357.7	\$107.9	\$419.3	100%	100%	57%
12/31/2016	\$0.0	\$361.7	\$102.0	\$465.0	100%	100%	101%
12/31/2017	\$0.0	\$343.9	\$93.7	\$553.3	100%	100%	224%
12/31/2018	\$0.0	\$329.8	\$81.8	\$570.7	100%	100%	294%
12/31/2019	\$0.0	\$326.9	\$77.0	\$644.1	100%	100%	412%
12/31/2020	\$0.0	\$319.3	\$64.3	\$680.2	100%	100%	530%
12/31/2021	\$0.0	\$308.9	\$60.2	\$763.2	100%	100%	754%

¹ An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.² The 12/31/2012 valuation reflects a change in cost method to Entry Age Normal.

Retiree Health Insurance Premium Account (RHIPA)							
Valuation Date ¹	Actuarial Accrued Liability			Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions	Retired Members and Beneficiaries	Other Members		(1)	(2)	(3)
	(1)	(2)	(3)				
12/31/2012 ²	\$0.0	\$15.1	\$45.3	\$4.4	100%	29%	0%
12/31/2013	\$0.0	\$16.1	\$45.1	\$5.2	100%	33%	0%
12/31/2014	\$0.0	\$15.7	\$54.9	\$7.2	100%	46%	0%
12/31/2015	\$0.0	\$14.9	\$52.9	\$11.2	100%	75%	0%
12/31/2016	\$0.0	\$14.4	\$53.5	\$19.1	100%	100%	9%
12/31/2017	\$0.0	\$14.4	\$53.5	\$19.1	100%	100%	9%
12/31/2018	\$0.0	\$14.0	\$48.8	\$38.5	100%	100%	50%
12/31/2019	\$0.0	\$12.1	\$47.2	\$51.9	100%	100%	84%
12/31/2020	\$0.0	\$10.8	\$37.2	\$63.6	100%	100%	142%
12/31/2021	\$0.0	\$10.2	\$35.7	\$82.9	100%	100%	203%

¹ An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.² The 12/31/2012 valuation reflects a change in cost method to Entry Age Normal.

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Actuarial Schedules

Analysis of Financial Experience

The schedule below shows results from the defined benefit pension plans and retiree healthcare plans on a consolidated basis. Results are also shown separately for each program on subsequent pages.

Gains and Losses in Unfunded Accrued Liability Resulting from Differences Between Assumed Experience and Actual Experience and Assumption Changes

(dollar amounts in millions)

Pension and Retiree Healthcare Plans	\$ Gain (or Loss) for Year	
	2021	2020
Type of Activity		
Retirements from Active Status	(\$89.9)	(\$52.9)
Active Mortality and Withdrawal	74.0	(49.7)
Pay Increases	(676.2)	12.1
Contributions	341.3	230.3
Interest Crediting Experience	(72.3)	(20.3)
Investment Income	8,739.5	1.3
Retirement, Mortality and Lump Sums from Inactive Status	14.0	7.4
Retiree and Beneficiary Mortality	137.7	95.7
New Entrants ¹	(106.0)	(89.6)
Other	142.5	104.5
Gain (or Loss) During Year from Financial Experience	\$8,504.6	\$238.9
Non-Recurring Items		
Assumption Changes	0.0	(3,249.0)
Plan Changes	0.0	(198.7)
Composite Gain (or Loss) During Year	\$8,504.6	(\$3,208.8)

¹ Accrued liability associated with new entrants is shown. For a full assessment of the new entrant effect on UAL, this would need to be combined with contributions associated with new entrants.



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The schedules below show results from the Tier One/Tier Two and OPSRP pension programs separately.

Gains and Losses in Unfunded Accrued Liability Resulting from Differences between Assumed Experience and Actual Experience and Assumption Changes

(dollar amounts in millions)

Tier 1/Tier 2 Pension Program	\$ Gain (or Loss) for Year	
	2021	2020
Type of Activity		
Retirements from Active Status	(\$87.2)	(\$52.6)
Active Mortality and Withdrawal	19.7	(18.6)
Pay Increases	(412.7)	4.1
Contributions	255.6	177.9
Interest Crediting Experience	(72.3)	(20.3)
Investment Income	7,445.1	(41.8)
Retirement, Mortality and Lump Sums from Inactive Status	8.1	5.5
Retiree and Beneficiary Mortality	136.8	93.6
New Entrants	(2.2)	(1.4)
Other	126.5	54.7
Gain (or Loss) During Year from Financial Experience	\$7,417.5	\$201.3
Non-Recurring Items		
Assumption Changes	0.0	(2,722.2)
Plan Changes	0.0	(133.6)
Composite Gain (or Loss) During Year	\$7,417.5	(\$2,654.6)

OPSRP Pension Program	\$ Gain (or Loss) for Year	
	2021	2020
Type of Activity		
Retirements from Active Status	(\$2.6)	(\$0.4)
Active Mortality and Withdrawal	\$54.3	(31.1)
Pay Increases	(\$263.6)	8.0
Contributions	\$84.3	51.0
Investment Income	\$1,197.5	42.0
Retirement, Mortality and Lump Sums from Inactive Status	\$5.9	1.9
Retiree and Beneficiary Mortality	\$0.9	2.0
New Entrants ¹	(\$103.7)	(88.2)
Other	\$2.7	34.3
Gain (or Loss) During Year from Financial Experience	\$975.6	\$19.6
Non-Recurring Items		
Assumption Changes	\$0.0	(542.7)
Plan Changes	\$0.0	(65.0)
Composite Gain (or Loss) During Year	\$975.6	(\$588.1)

¹ Accrued liability associated with new entrants is shown. For a full assessment of the new entrant effect on UAL, this would need to be combined with contributions associated with new entrants.



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The schedule below shows results from the retiree healthcare programs.

Gains and Losses in Unfunded Accrued Liability Resulting from Differences Between Assumed Experience and Actual Experience and Assumption Changes

(dollar amounts in millions)

Retiree Healthcare Programs	\$ Gain (or Loss) for Year			
	RHIA		RHIPA	
	2021	2020	2021	2020
Type of Activity				
Contributions	\$0.6	\$0.7	\$0.7	\$0.6
Investment Income	88.3	0.7	8.6	0.5
Other	10.6	11.5	2.7	4.0
Gain (or Loss) During Year from Financial Experience	\$99.5	\$12.9	\$12.0	\$5.1
Non-Recurring Items				
Assumption Changes	0.0	7.1	0.0	8.9
Plan Changes	0.0	0.0	0.0	0.0
Composite Gain (or Loss) During Year	\$99.5	\$20.0	\$12.0	\$14.0



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Actuarial Schedules

Schedules of Funding Progress

(dollar amounts in millions)

Actuarial Valuation Date	Actuarial Value of Assets ¹ (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
Pension Benefits - Tier One/Tier Two and OPSRP²						
12/31/2012 ³	\$54,784.1	\$60,405.2	\$5,621.1	90.7%	\$8,590.9	65.4%
12/31/2013 ⁴	\$60,014.1	\$62,593.6	\$2,579.5	95.9%	\$8,671.8	29.7%
12/31/2014 ⁵	\$61,395.2	\$73,458.9	\$12,063.7	83.6%	\$9,115.8	132.3%
12/31/2015 ⁴	\$60,000.1	\$76,196.6	\$16,196.5	78.7%	\$9,544.1	169.7%
12/31/2016	\$61,059.0	\$80,970.3	\$19,911.2	75.4%	\$9,872.6	201.7%
12/31/2017 ⁴	\$67,326.1	\$84,056.1	\$16,730.0	80.1%	\$10,098.9	165.7%
12/31/2018	\$64,802.3	\$86,574.7	\$21,772.4	74.9%	\$10,852.0	200.6%
12/31/2019 ⁴	\$70,312.3	\$89,445.7	\$19,133.5	78.6%	\$11,533.7	165.9%
12/31/2020	\$72,378.3	\$95,300.4	\$22,922.1	75.9%	\$12,042.7	190.3%
12/31/2021	\$85,001.3	\$98,401.4	\$13,400.1	86.4%	\$12,684.1	105.6%
Postemployment Healthcare Benefits - Retirement Health Insurance Account						
12/31/2012	\$291.6	\$471.8	\$180.2	61.8%	\$8,590.9	2.1%
12/31/2013	\$353.5	\$473.6	\$120.0	74.7%	\$8,671.8	1.4%
12/31/2014	\$395.9	\$468.4	\$72.5	84.5%	\$9,115.8	0.8%
12/31/2015	\$419.3	\$465.6	\$46.3	90.0%	\$9,544.1	0.5%
12/31/2016	\$465.0	\$463.7	(\$1.3)	100.3%	\$9,872.6	(0.0%)
12/31/2017	\$553.3	\$437.6	(\$115.7)	126.4%	\$10,098.9	(1.1%)
12/31/2018	\$570.7	\$411.7	(\$159.1)	138.6%	\$10,852.0	(1.5%)
12/31/2019	\$644.1	\$403.9	(\$240.3)	159.5%	\$11,533.7	(2.1%)
12/31/2020	\$660.2	\$383.6	(\$276.6)	172.1%	\$12,042.7	(2.3%)
12/31/2021	\$763.2	\$369.2	(\$394.0)	206.7%	\$12,684.1	(3.1%)
Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account						
12/31/2012	\$4.4	\$60.3	\$55.9	7.4%	\$2,432.4	2.3%
12/31/2013	\$5.2	\$61.2	\$55.9	8.6%	\$2,531.5	2.2%
12/31/2014	\$7.2	\$70.5	\$63.3	10.2%	\$2,718.9	2.3%
12/31/2015	\$11.2	\$67.8	\$56.6	16.5%	\$2,831.8	2.0%
12/31/2016	\$19.1	\$67.9	\$48.8	28.1%	\$2,881.4	1.7%
12/31/2017	\$29.8	\$69.4	\$39.5	43.0%	\$2,984.5	1.3%
12/31/2018	\$38.5	\$62.7	\$24.3	61.3%	\$3,211.6	0.8%
12/31/2019	\$51.9	\$59.3	\$7.4	87.5%	\$3,479.8	0.2%
12/31/2020	\$63.6	\$48.0	(\$15.6)	132.6%	\$3,712.6	(0.4%)
12/31/2021	\$82.9	\$45.9	(\$37.0)	180.4%	\$3,938.0	(0.9%)

¹ Side account assets are included with pension assets.² Includes UAAL for Multnomah Fire District (\$127 million as of 12/31/2021).³ The 12/31/2012 valuation reflects the benefit changes enacted by the 2013 Oregon Legislature in Senate Bills 822 and 861, as well as a change in cost method to Entry Age Normal.⁴ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective January 1 following the valuation date.⁵ The 12/31/2014 valuation reflects benefit changes from the Oregon Supreme Court's ruling in *Mbro v. State of Oregon*, which overturned portions of Senate Bills 822 and 861.

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Summary of Plan Provisions



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Summary of Plan Provisions

The following section summarizes the plan provisions considered in the actuarial valuation. A more detailed description of plan provisions is available from PERS.

<i>Membership</i>	All employees of public employers participating in this System who are in qualifying positions become members of the System after completing six months of service except those who are eligible for and have elected to participate in an optional retirement plan. Different benefit provisions of the plan apply based on date of hire.	
	Tier One	Hired prior to 1996
	Tier Two	Hired after 1995 and before August 29, 2003
	OPSRP	Hired after August 28, 2003, and neither a judge nor a former Tier One/Tier Two member eligible to reestablish Tier One/Tier Two membership
	Judges	Members of the State Judiciary
<i>Member Contributions</i>	Judges	7% of salary
	All others	Prior to January 1, 2004, Tier One/Tier Two members contributed 6% of salary to member accounts. Effective July 1, 2020: 2.50% of salary for Tier One/Tier Two members and 0.75% of salary for OPSRP members (only applicable to members earning at least \$2,500 per month, indexed for inflation and further increased to \$3,333 per month effective in 2022) are contributed to Employee Pension Stability Accounts (EPSA). EPSA balances will not affect the calculation of Money Match or Formula Plus Annuity benefits.
<i>Employer Contributions</i>	Set by the PERS Board based on actuarial calculations that follow Board rate-setting policies for employers.	



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Summary of Chapter 238 Provisions — Tier One/Tier Two and Judges

<i>Normal Retirement Date</i>	Police and Fire	Age 55
	Judges	Age 65
	Tier One General Service	Age 58
	Tier Two General Service	Age 60

Normal Retirement Allowance For Members who are not Judges, the greatest of the Full Formula benefit, the Money Match benefit, or the Formula Plus Annuity benefit (only available to Members who made contributions before August 21, 1981). For Members with 15 or more years of creditable service, the benefit will not be less than the minimum service retirement allowance of \$100 per month, as described in ORS 238.310.

Full Formula The percentage multiplier from the table below multiplied by final average salary and years of creditable service plus a prior service pension, if applicable.

Percentage Multiplier	Membership Classification
2.00%	Fire, Police and Legislators
1.67%	All other members

Money Match The Member's account balance and a matching employer amount converted to an actuarially equivalent annuity.

Formula Plus Annuity The Member's account balance converted to an actuarially equivalent cash refund annuity plus the percentage multiplier from the table below multiplied by final average salary and years of creditable service, plus a prior service pension, if applicable.

Percentage Multiplier	Membership Classification
1.35%	Fire, Police and Legislators
1.00%	All other members

Judges Final average salary multiplied by the first percentage multiplier from the table below for up to 16 years of service plus the second percentage multiplier for any service in excess of 16 years, but not to exceed the maximum percentage of final average salary also shown below. Judges must elect Plan A or Plan B no later than age 60. A "Plan B" judge must serve as a pro tem judge for a total of 175 days postretirement.

Plan	Percentage Factor (up to 16 years)	Percentage Factor (after 16 years)	Maximum Percentage of Final Average Salary
A	2.8125%	1.67%	65%
B	3.75%	2.00%	75%



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Final Average Salary The greater of:

- Average salary earned during the three calendar years in which the member was paid the highest salary, even if one of those years is less than a full calendar year.
- Total salary earned over the last 36 months of employment divided by the actual months of service during that 36-month period.

Covered salary for this purpose includes the value of member contributions assumed and paid by employers, any payment due to an employer's participation in the Unused Sick Leave program, and, for Tier One members, lump sum payment of unused vacation time. For Tier Two members, covered salary is limited by Internal Revenue Code 401(a)(17). The limit was \$280,000 in 2019. Tier One members are not subject to this limit. Under Senate Bill 1049, passed during the 2019 legislative session, the salary included in the determination of Final Average Salary will be limited for all members beginning in 2020. The limit will be equal to \$195,000 in 2020 and will be indexed with inflation in later years. For this purpose, payment due to the unused sick leave program will not be affected by the Final Average Salary limit. However, lump sum payments of unused vacation time for Tier One members will be included in total salary subject to the limit.

Creditable Service The number of years and months an active Member is paid a salary by a participating PERS employer and PERS benefits are being funded.

Prior Service Pension Benefits payable on account of Prior Service Credit for a member's service with a participating employer prior to the employer's participation in PERS, as described in ORS 238.442.

SB 656/ HB 3349 Adjustment All members receive an increase to their monthly retirement benefit equal to the greater of the increase under Senate Bill 656 (SB 656) or House Bill 3349 (HB 3349). The adjustment for SB 656 only applies to members who established membership prior to July 14, 1995. Senate Bill 822, enacted in 2013, limits eligibility for these adjustments to only PERS beneficiaries who pay Oregon state income tax.

SB 656 Increase

Years of Service	General Service	Police & Fire
0-9	0.0%	0.0%
10-14	1.0	1.0
15-19	1.0	1.0
20-24	2.0	2.5
25-29	3.0	4.0
30 & Over	4.0	4.0

HB 3349 Increase

$$\left(\frac{1}{1 - \text{maximum Oregon personal income tax rate (limited to 9\%)}} - 1 \right) \times \frac{\text{Service prior to October 1, 1991}}{\text{All Service}}$$



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Milliman Actuarial Valuation

Summary of Plan Provisions

<i>Early Retirement Eligibility</i>	Police and Fire	Age 50 or 30 years of service
	Judges	Age 60
	General Service	Age 55 or 30 years of service
<i>Early Retirement Allowance</i>	Normal retirement allowance, actuarially reduced to early retirement age. However, there is no reduction applied if a member has completed 30 years of service (25 years for police & fire members) or for judges in Plan B.	
<i>Vesting</i>	Contributions made in any part of five calendar years or attainment of age 50 (45 for police & fire) while working in a qualifying position.	
<i>Termination Benefits</i>	Non-Vested	Payment of member's account balance.
	Vested	Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date.
<i>Optional Forms of Retirement Allowance</i>	<p>The normal form of benefit is a cash refund annuity (joint and two-thirds survivor contingent annuity for a married judge). All optional amounts are adjusted to be actuarially equivalent.</p> <p>Options Available</p> <ul style="list-style-type: none"> • Life annuity • Cash refund annuity • Life annuity guaranteed 15 years • Joint and 50% or 100% survivor contingent annuity, with or without pop-up feature • Partial Lump Sum: Refund of member contribution account balance plus a pension (under any optional form) of employer-paid portion of the Full Formula or Money Match annuity. • Total Lump Sum: Refund of member contribution account plus a matching employer amount. 	
<i>Preretirement Death Benefit Eligibility</i>	Judges	Six or more years of service.
	All others	Death occurring while the member is an employee of a participating employer or within 120 days of termination provided the employee does not withdraw the account balance or retire, or a result of injuries received while in the service of a participating employer.
<i>Preretirement Death Benefit</i>	Judges	The spouse shall receive a life pension equal to two-thirds of the service retirement allowance. The beneficiary of an unmarried judge shall receive the member's accumulated contributions with interest.
	All others	<p>The member's account balance plus a matching employer amount. If the beneficiary is the member's spouse, they may instead elect to receive the following benefit:</p> <ul style="list-style-type: none"> • If the member was eligible for retirement, the actuarial equivalent of the retirement benefit the member was eligible to receive at date of death. • If the member was not eligible for retirement, 50% of the actuarial equivalent of the retirement benefit the member would have been eligible to receive if they had terminated employment on their date of death and retired at the earliest possible date.



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Milliman Actuarial Valuation

Summary of Plan Provisions

<i>Additional Police & Fire Death Benefits</i>	Upon the death of a retired police officer or firefighter, the surviving spouse or dependent children under age 18 will receive a monthly benefit based on 25% of the cash refund retirement allowance due to police and fire service.	
<i>Disability Benefit Eligibility</i>	Duty	Disability occurring as a direct result of a job-related injury or illness, regardless of length of service.
	Non-Duty	Disability occurring after ten years of service (six years, if a judge), but prior to normal retirement eligibility.
<i>Disability Benefits</i>	<p>The normal retirement allowance calculated based on the service credit that would have been earned if the member had continued working to age 58 (age 55 for police and fire, age 65 for judge members) payable commencing immediately.</p> <p>Fire and Police Members' Alternative</p> <p>In lieu of the above, firefighters and police officers who qualify for duty disability may elect to receive a benefit of 50% of final average monthly salary at the time of disablement.</p> <p>Minimum Monthly Retirement Allowance</p> <p>Judges 45% of final average monthly salary.</p> <p>All others \$100 for a member with at least 15 years of creditable service, actuarially reduced if an optional form of benefit is chosen.</p> <p>Reduction of Benefits</p> <p>Whenever a disabled employee's disability benefit and earned income for any month exceed the monthly salary received at the time of disablement or \$400, if greater, the disability benefit will be reduced by the excess.</p> <p>For Tier Two members, the disability benefit may not exceed the member's salary at the time of disablement.</p>	
<i>Waiting Time Service Purchases</i>	Members with at least 10 years of combined credited and/or prior service under PERS may elect to purchase service credit for the six-month "waiting time" period worked prior to establishing membership in the system. The waiting time purchase is interest-free and must be purchased in one payment prior to retirement.	
<i>Police & Fire Unit Purchases</i>	Police & fire members may purchase 60-month annuity benefits (up to \$80 per month) that must be paid out by age 65 and cannot commence prior to the earliest retirement age. The amount purchased by the member is matched by the employer. In certain situations, such as termination of employment prior to retiring, or working beyond age 65, the employer's matching purchase is forfeited.	
<i>Automatic Postretirement Cost of Living Adjustments (COLAs)</i>	All monthly pension and annuity benefits except unit purchases are eligible for postretirement adjustments. As a result of the Senate Bills 822 and 861 and the Oregon Supreme Court decision in <i>Moro v. State of Oregon</i> , automatic postretirement adjustments are based on a blended COLA as described below.	
	Automatic COLA prior to SB 822 and SB 861	<p>Benefits were adjusted annually to reflect the increase or decrease in the Consumer Price Index (Portland area - all items) as published by the Bureau of Labor Statistics.</p> <p>The maximum adjustment to be made for any year was 2% of the previous year's benefit. Any CPI change in excess of the limit was accumulated for future benefit adjustments which would otherwise be less than the limit. No benefit was decreased below its original amount.</p>



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Milliman Actuarial Valuation

Summary of Plan Provisions

	<p>Automatic Adjustments Provided by Senate Bills 822 and 861</p> <p>Blended COLA after Moro decision</p>	<p>This legislation, passed in 2013, provided for that benefits would be increased annually based on a marginal rate schedule. The increase is calculated as 1.25% on the first \$80,000 of annual benefit and 0.15% on amounts above \$80,000 of annual benefit.</p> <p>The Supreme Court decision in <i>Moro</i> requires that members "will be entitled to receive during retirement a blended COLA rate that reflects the different COLA provisions applicable to benefits earned at different times." The Supreme Court did not articulate a specific methodology for determining the blended COLA. For purposes of this valuation, we have determined the blend based on creditable service earned before and after October 2013. This approach is consistent with OAR 459-005-0510 adopted by the PERS Board in September 2015.</p>
<i>Ad Hoc Adjustments</i>		From time to time, as granted by the Legislature, retired members and beneficiaries have received increases in their monthly benefits.
<i>Variable Annuity Program</i>	<p>Contributions</p> <p>Benefit</p>	<p>Prior to January 1, 2004, members could elect to have 25, 50 or 75 percent of their contributions invested in the variable account.</p> <p>At retirement, members may elect to receive a variable annuity with the funds accumulated in their variable account.</p> <p>Alternatively, members may elect to have all or a portion of the funds in their variable account transferred back to the regular account and receive an annuity from the System as though no variable annuity program existed.</p> <p>The employer-provided benefit, however, is based on the earnings the member would have received in the regular account.</p>
<i>Interest Credit on Member Accounts</i>	<p>Tier One Regular</p> <p>Tier Two Regular</p> <p>Variable</p>	<p>Actuarially assumed rate of return until the rate guarantee reserve has been fully funded for three consecutive years and the Board elects to credit additional interest.</p> <p>Amount determined by the Board based on actual investment earnings of the regular account.</p> <p>Actual earnings in variable account.</p>
<i>Retiree Healthcare – Medicare Supplement (RHIA)</i>	Retiree Eligibility	<p>All of the following must be met:</p> <ul style="list-style-type: none"> (a) Currently receiving a retirement allowance from the System, (b) Covered for eight years before retirement, (c) Enrolled in a PERS-sponsored health plan, and (d) Enrolled in both Medicare Part A and Part B.



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	Surviving Spouse or Dependent Eligibility	<p>A surviving spouse or dependent of a deceased RHIA-eligible retiree is eligible for RHIA benefits if they are enrolled in both Medicare Part A and Part B, and <i>either</i> of the following criteria are met:</p> <ul style="list-style-type: none"> (a) Currently receiving a retirement allowance from the System, or (b) The surviving spouse or dependent was covered under the eligible retiree's PERS-sponsored health insurance at the time of the retiree's death and the deceased retiree retired before May 1, 1991. 															
	Benefit Amount	A monthly contribution of up to \$60 per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.															
<i>Retiree Healthcare – Under Age 65 (RHIPA)</i>	Retiree Eligibility	Retired PERS members who were state employees at the time of retirement, are enrolled in a PERS-sponsored health plan, and are not eligible for Medicare.															
	Surviving Spouse or Dependent Eligibility	<p>A surviving spouse or dependent of a deceased RHIPA-eligible retiree is eligible for RHIPA benefits if they are not yet eligible for Medicare, and <i>either</i> of the following criteria are met:</p> <ul style="list-style-type: none"> (a) Currently receiving a retirement allowance from the System, or (b) The surviving spouse or dependent was covered under the eligible retiree's PERS-sponsored health plan at the time of the retiree's death and the deceased retiree retired on or after September 29, 1991. 															
	Benefit	<p>A percentage (as shown in the table below) of the maximum monthly subsidy based on years of service. The maximum monthly subsidy is calculated annually as the average difference between the health insurance premiums paid by active state employees and the premium retirees would pay if they were rated separately from active state employees.</p> <p>The maximum monthly subsidy for 2021 is \$428.17 per month.</p> <table border="1"> <thead> <tr> <th>Years of Service with State Employer</th> <th>Subsidized Amount</th> </tr> </thead> <tbody> <tr> <td>Under 8</td> <td>0%</td> </tr> <tr> <td>8-9</td> <td>50%</td> </tr> <tr> <td>10-14</td> <td>60%</td> </tr> <tr> <td>15-19</td> <td>70%</td> </tr> <tr> <td>20-24</td> <td>80%</td> </tr> <tr> <td>25-29</td> <td>90%</td> </tr> <tr> <td>30 & Over</td> <td>100%</td> </tr> </tbody> </table>	Years of Service with State Employer	Subsidized Amount	Under 8	0%	8-9	50%	10-14	60%	15-19	70%	20-24	80%	25-29	90%	30 & Over
Years of Service with State Employer	Subsidized Amount																
Under 8	0%																
8-9	50%																
10-14	60%																
15-19	70%																
20-24	80%																
25-29	90%																
30 & Over	100%																



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Milliman Actuarial Valuation**Summary of Plan Provisions**

<i>Changes in Plan Provisions</i>	Senate Bill 111, enacted in June 2021, increased the optional death benefit available to a surviving spouse when a retirement-eligible member dies. Previously, this benefit was based on 50% of the actuarial equivalent value of the member's retirement benefit, but this was increased to 100% of the actuarial equivalent value. House Bill 2906 increased the monthly pay threshold for member redirect contributions to \$3,333 (indexed) effective in 2022. Both plan changes were first reflected in the December 31, 2020 advisory actuarial valuation. This is the first rate-setting valuation where the provisions are reflected.
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Summary of Chapter 238A Provisions — OPSRP

<i>Normal Retirement Date</i>	Police & Fire	Age 60 or age 53 with 25 years of retirement credit
	General Service	Age 65 or age 58 with 30 years of retirement credit
	School Districts	Age 65 or age 58 with 30 calendar years of active membership
<i>Normal Retirement Allowance</i>	A single life annuity equal to final average salary times years of retirement credit attributable to service as fire and police times 1.8% plus final average salary times all other years of retirement credit times 1.5%.	
<i>Final Average Salary</i>	<p>The greater of:</p> <ul style="list-style-type: none"> • Average salary earned during the three calendar years in which the member was paid the highest salary, even if one of those years is less than a full calendar year. • Total salary earned over the last 36 months of employment divided by the actual months of service during that 36-month period. <p>Covered salary for this purpose includes base pay, plus overtime up to an average amount, plus bonuses, plus member contributions paid by the employer on a salary reduction basis. Excludes payments of unused vacation or accumulated sick leave at retirement, and member contributions "assumed and paid" by the employer.</p> <p>For OPSRP members, covered salary is limited by Internal Revenue Code 401(a)(17). The limit was \$280,000 in 2019.</p> <p>Under Senate Bill 1049 passed during the 2019 legislative session, the salary included in the determination of Final Average Salary will be limited for all members beginning in 2020. The limit will be equal to \$195,000 in 2020 and will be indexed with inflation in later years.</p>	
<i>Early Retirement Eligibility</i>	Police & Fire	Age 50 and 5 years of vesting service
	General Service	Age 55 and 5 years of vesting service
<i>Early Retirement Allowance</i>	Normal retirement allowance, actuarially reduced to early retirement age.	
<i>Vesting</i>	Five years or attainment of normal retirement age.	
<i>Vested Termination Benefit</i>	Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date.	
<i>Optional Forms of Retirement Benefit</i>	<p>The normal form of benefit is a life annuity. All optional amounts are adjusted to be actuarially equivalent.</p> <p>Options Available</p> <ul style="list-style-type: none"> • Life annuity • Joint and 50% or 100% survivor contingent benefit, with or without pop-up feature • Lump sum if monthly normal retirement benefit is less than \$200 or if lump sum value is less than \$5,000. 	
<i>Preretirement Death Benefit Eligibility</i>	Death of a vested member before retirement benefits begin.	

Milliman Actuarial Valuation

Summary of Plan Provisions

Preretirement Death Benefit	If the member was eligible for retirement, the actuarial equivalent of the retirement benefit the member was eligible to receive at date of death. If the member was not eligible for retirement, 50% of the actuarial equivalent of the retirement benefit the member would have been eligible to receive if they had terminated employment on their date of death and retired at the earliest possible date.	
Disability Benefit Eligibility	Duty	Disablement occurring as a direct result of a job-related injury or illness, regardless of length of service.
	Non-Duty	Disablement occurring after ten years of service, but prior to normal retirement eligibility.
Disability Benefit Amounts	Preretirement Benefit	45% of salary during last full month of employment before disability, reduced if the total benefit exceeds 75% of salary. Benefit is payable monthly until normal retirement age.
	Retirement Benefit	Same formula as Normal Retirement Benefit, except: Final average salary is adjusted to reflect cost-of-living increases from date of disability to normal retirement age, and Retirement credits continue to accrue from date of disability to normal retirement age.
Postretirement Adjustments	All monthly pension and annuity benefits except unit purchases are eligible for postretirement adjustments. As a result of the Senate Bills 822 and 861 and the Oregon Supreme Court decision in <i>Moro v. State of Oregon</i> , automatic postretirement adjustments are based on a blended COLA as described below.	
	Automatic COLA prior to SB 822 and SB 861	Benefits were adjusted annually to reflect the increase or decrease in the Consumer Price Index (Portland area - all items) as published by the Bureau of Labor Statistics. The maximum adjustment to be made for any year was 2% of the previous year's benefit. Any CPI change in excess of the limit was accumulated for future benefit adjustments which would otherwise be less than the limit. No benefit was decreased below its original amount.
	Automatic Adjustments Provided by Senate Bills 822 and 861	This legislation, passed in 2013, provided that prospectively benefits would be increased annually based on a marginal rate schedule. The increase is calculated as 1.25% on the first \$60,000 of annual benefit and 0.15% on amounts above \$60,000 of annual benefit.
Changes in Plan Provisions	Senate Bill 111, enacted in June 2021, increased the death benefit payable to a surviving spouse when a retirement-eligible member dies. Previously, the benefit was based on 50% of the actuarial equivalent value of the member's retirement benefit, but this was increased to 100% of the actuarial equivalent value. House Bill 2906 increased the monthly pay threshold for member redirect contributions to \$3,333 (indexed) effective in 2022. Both plan changes were first reflected in the December 31, 2020 advisory actuarial valuation. This is the first rate-setting valuation where the provisions are reflected.	



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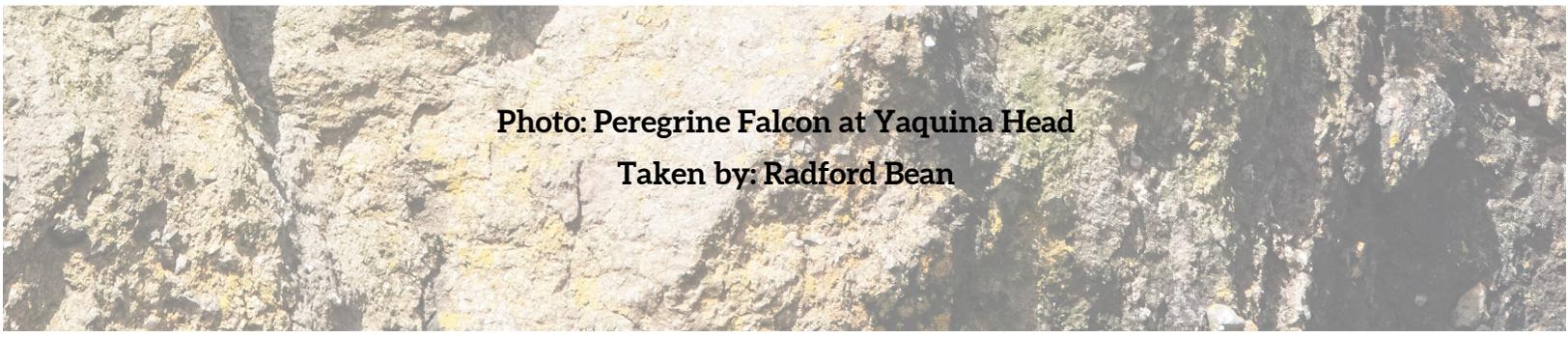
PUBLIC EMPLOYEES RETIREMENT SYSTEM





STATISTICAL SECTION

**Photo: Peregrine Falcon at Yaquina Head
Taken by: Radford Bean**



OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM



Statistical Notes

The Statistical Section of PERS ACFR presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the System's overall financial health. The data presented was extracted from PERS' information systems.

Financial Trends

These schedules contain trend information to help the reader understand how the System's financial performance and well-being have changed over time. Financial information is presented on an accrual basis.

The Schedules of Additions by Source, Deductions by Type, and Changes in Fiduciary Net Position are presented on both a fiscal- and calendar-year basis. The System prepares its financial statements on a fiscal-year basis but has its actuarial valuations performed on a calendar-year basis.

The Schedule of Earnings and Crediting at December 31 shows earnings available for crediting (net of administrative expenses) and the rates approved by the PERS Board for the programs it administers.

The Schedule of Benefit Expenses by Type provides additional detail about benefit expenses for fiscal years reported in the aggregate in the Schedules of Deductions by Type.

Operating Information

These schedules contain data to help illustrate how the information in the System's financial reports relates to the services the System provides and the activities it performs.

The Schedule of Average OPEB Benefits for Retirement Health Insurance Account and Schedule of Average OPEB Benefits for Retiree Health Insurance Premium Account show the average monthly other postemployment healthcare benefits and the number of retirees receiving benefits under each plan.

The Schedule of Average Defined Benefit Pension Payments presents average monthly benefits, final average salary, and number of retirees still receiving benefits by year of retirement.

The Schedule of Benefit Recipients by Benefit Type shows retired members by benefit level, benefit type, and payment option selected.

The Schedule of Retirement System Membership shows demographics of membership over a period of time. The fiscal year schedule shows membership over the last nine years. The calendar-year schedule is in five-year increments going back to 1985.

The Schedule of Principal Participating Employers shows the 10 employers with the largest number of current employees, along with aggregate information for the remaining employers with current employees.

The Schedule of Participating Employers lists all employers as of June 30, 2022, to show public employers of the state of Oregon participating in PERS.

Statistical Section

Additions by Source - Retirement Programs
For the Last Ten Fiscal Years Ended June 30:

Defined Benefit Pension Plan

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2013	\$ 16,985,722	\$ 834,161,587	10.26 %	\$ 6,949,742,064	\$ 7,800,889,373
2014	15,319,270	915,236,878	10.54	9,886,700,639	10,817,256,787
2015	13,785,439	1,123,256,703	12.25	2,364,479,372	3,501,521,514
2016	14,214,341	977,332,329	10.37	413,915,853	1,405,462,523
2017	13,177,984	1,022,201,249	10.18	7,660,055,575	8,695,434,808
2018	12,558,631	1,390,111,534	13.84	6,247,472,490	7,650,142,655
2019	11,354,366	1,720,183,341	16.21	4,010,048,029	5,741,585,736
2020	10,179,238	2,299,006,203	18.99	923,260,755	3,232,446,196
2021	160,309,347	2,161,450,927	17.67	18,998,415,630	21,320,175,904
2022	160,097,904	4,030,158,539	31.14	789,784,656	4,980,041,099

Employee Pension Stability Accounts (included in Defined Benefit Pension Plan above)

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2021	\$ 150,427,846	N/A	N/A %	\$ 22,744,173	\$ 173,172,019
2022	152,691,859	N/A	N/A	24,233,448	176,925,307

Oregon Public Service Retirement Plan
Individual Account Program

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2013	\$ 510,796,006	N/A	N/A %	\$ 635,350,054	\$ 1,146,146,060
2014	527,303,202	N/A	N/A	977,439,367	1,504,742,569
2015	563,417,649	N/A	N/A	276,949,224	840,366,873
2016	566,450,233	N/A	N/A	76,509,002	642,959,235
2017	605,277,281	N/A	N/A	948,360,842	1,553,638,123
2018	622,296,460	N/A	N/A	772,501,114	1,394,797,574
2019	647,139,479	N/A	N/A	565,351,952	1,212,491,431
2020	711,193,387	N/A	N/A	242,628,243	953,821,630
2021	578,414,037	N/A	N/A	2,560,936,405	3,139,350,442
2022	630,155,422	N/A	N/A	(218,607,143)	411,548,279

Deferred Compensation Plan

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2013	\$ 74,248,188	N/A	N/A %	\$ 135,572,819	\$ 209,821,007
2014	92,174,335	N/A	N/A	203,181,598	295,355,933
2015	99,796,739	N/A	N/A	48,617,428	148,414,167
2016	107,286,636	N/A	N/A	3,166,856	110,453,492
2017	121,701,967	N/A	N/A	189,041,478	310,743,445
2018	134,259,568	N/A	N/A	169,577,769	303,837,337
2019	139,543,729	N/A	N/A	104,963,768	244,507,497
2020	150,478,458	N/A	N/A	73,406,068	223,884,526
2021	151,995,862	N/A	N/A	630,011,342	782,007,204
2022	195,637,308	N/A	N/A	(348,864,446)	(153,227,138)

**Deductions by Type - Retirement Programs
For the Last Ten Fiscal Years Ended June 30:**

Defined Benefit Pension Plan

Fiscal Year	Benefits		Administrative Expenses		Refunds		Total
2013	\$	3,556,059,999	\$	33,505,928	\$	17,439,568	\$ 3,607,005,495
2014		3,837,870,411		31,247,350		25,560,094	3,894,677,855
2015		3,927,167,032		35,739,837		16,481,215	3,979,388,084
2016		4,193,307,712		40,567,225		13,154,578	4,247,029,515
2017		4,346,282,735		43,546,184		15,961,744	4,405,790,663
2018		4,642,717,844		37,751,319		13,876,294	4,694,345,457
2019		4,815,058,600		38,403,320		11,903,642	4,865,365,562
2020		5,045,931,154		52,083,371		18,855,297	5,116,869,822
2021		5,237,137,595		59,084,400		11,934,465	5,308,156,460
2022		5,468,215,109		58,696,368		14,893,205	5,541,804,682

Employee Pension Stability Accounts (included in Defined Benefit Pension Plan above)

Fiscal Year	Benefits		Administrative Expenses		Transfers		Total
2021	\$	-	\$	480	\$	-	\$ 480
2022		-		528		18,089,202	18,089,730

**Oregon Public Service Retirement Plan
Individual Account Program**

Fiscal Year	Benefits		Administrative Expenses		Refunds		Total
2013	\$	241,326,511	\$	7,093,871	\$	N/A	\$ 248,420,382
2014		330,535,801		6,934,980		N/A	337,470,781
2015		319,978,740		7,565,611		N/A	327,544,351
2016		364,549,091		8,478,008		N/A	373,027,099
2017		417,119,098		9,481,014		N/A	426,600,112
2018		546,866,343		12,309,768		N/A	559,176,111
2019		490,459,364		12,568,466		N/A	503,027,830
2020		611,602,249		11,828,627		N/A	623,430,876
2021		577,899,925		12,827,760		N/A	590,727,685
2022		744,712,857		12,158,259		N/A	756,871,116

Deferred Compensation Plan

Fiscal Year	Benefits		Administrative Expenses		Refunds		Total
2013	\$	70,550,942	\$	874,584	\$	N/A	\$ 71,425,526
2014		89,652,030		997,202		N/A	90,649,232
2015		84,177,564		1,018,468		N/A	85,196,032
2016		91,351,490		1,202,786		N/A	92,554,276
2017		97,089,531		1,330,947		N/A	98,420,478
2018		116,331,317		1,469,816		N/A	117,801,133
2019		123,057,988		2,278,273		N/A	125,336,261
2020		118,349,853		2,071,770		N/A	120,421,623
2021		136,614,998		2,419,306		N/A	139,034,304
2022		161,003,068		1,834,870		N/A	162,837,938

Statistical Section

**Changes in Fiduciary Net Position - Retirement Programs
For the Last Ten Fiscal Years Ended June 30:**

Defined Benefit Pension Plan

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2013	\$ 7,800,889,373	\$ 3,607,005,495	\$ 4,193,883,878	\$ 54,285,029,854	\$ 58,478,913,732
2014	10,817,256,787	3,894,677,855	6,922,578,932	58,478,913,732	65,401,492,664
2015	3,501,521,514	3,979,388,084	(477,866,570)	65,401,492,664	64,923,626,094
2016	1,405,462,523	4,247,029,515	(2,841,566,992)	64,923,626,094	62,082,059,102
2017	8,695,434,808	4,405,790,663	4,289,644,145	62,082,059,102	66,371,703,247
2018	7,650,142,655	4,694,345,457	2,955,797,198	66,371,703,247	69,327,500,445
2019	5,741,585,736	4,865,365,562	876,220,174	69,327,500,445	70,203,720,619
2020	3,232,446,196	5,116,869,822	(1,884,423,626)	70,203,720,619	68,319,296,993
2021	21,320,175,904	5,308,156,460	16,012,019,444	68,319,296,993	84,331,316,437
2022	4,980,041,099	5,541,804,682	(561,763,583)	84,331,316,437	83,769,552,854

Employee Pension Stability Accounts (included in Defined Benefit Pension Plan above)

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2021	\$ 173,172,019	\$ 480	\$ 173,171,539	\$ 0	\$ 173,171,539
2022	176,925,307	18,089,730	158,835,577	173,171,539	332,007,116

**Oregon Public Service Retirement Plan
Individual Account Program**

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2013	\$ 1,146,146,060	\$ 248,420,382	\$ 897,725,678	\$ 4,392,119,800	\$ 5,289,845,478
2014	1,504,742,569	337,470,781	1,167,271,788	5,289,845,478	6,457,117,266
2015	840,366,873	327,544,351	512,822,522	6,457,117,266	6,969,939,788
2016	642,959,235	373,027,099	269,932,136	6,969,939,788	7,239,871,924
2017	1,553,638,123	426,600,112	1,127,038,011	7,239,871,924	8,366,909,935
2018	1,394,797,574	559,176,111	835,621,463	8,366,909,935	9,202,531,398
2019	1,212,491,431	503,027,830	709,463,601	9,202,531,398	9,911,994,999
2020	953,821,630	623,430,876	330,390,754	9,911,994,999	10,242,385,753
2021	3,139,350,442	590,727,685	2,548,622,757	10,242,385,753	12,791,008,510
2022	411,548,279	756,871,116	(345,322,837)	12,791,008,510	12,445,685,673

Deferred Compensation Plan

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2013	\$ 209,821,007	\$ 71,425,526	\$ 138,395,481	\$ 1,133,567,631	\$ 1,271,963,112
2014	295,355,933	90,649,232	204,706,701	1,271,963,112	1,476,669,813
2015	148,414,167	85,196,032	63,218,135	1,476,669,813	1,539,887,948
2016	110,453,492	92,554,276	17,899,216	1,539,887,948	1,557,787,164
2017	310,743,445	98,420,478	212,322,967	1,557,787,164	1,770,110,131
2018	303,837,337	117,801,133	186,036,204	1,770,110,131	1,956,146,335
2019	244,507,497	125,336,261	119,171,236	1,956,146,335	2,075,317,571
2020	223,884,526	120,421,623	103,462,903	2,075,317,571	2,178,780,474
2021	782,007,204	139,034,304	642,972,900	2,178,780,474	2,821,753,374
2022	(153,227,138)	162,837,938	(316,065,076)	2,821,753,374	2,505,688,298

Additions by Source - OPEB

For the Last Ten Fiscal Years Ended June 30:

Retirement Health Insurance Account

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2013	N/A	\$ 47,294,060	0.57 %	\$ 35,636,711	\$ 82,930,771
2014	N/A	48,253,398	0.56	56,194,217	104,447,615
2015	N/A	53,648,437	0.59	15,606,876	69,255,313
2016	N/A	44,587,963	0.47	4,246,552	48,834,515
2017	N/A	49,785,501	0.50	57,566,224	107,351,725
2018	N/A	47,997,918	0.48	50,869,212	98,867,130
2019	N/A	49,615,345	0.47	35,959,368	85,574,713
2020	N/A	6,359,609	0.06	8,595,287	14,954,896
2021	N/A	2,963,356	0.02	171,822,210	174,785,566
2022	N/A	2,458,525	0.02	7,546,640	10,005,165

Retiree Health Insurance Premium Account

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2013	N/A	\$ 3,443,805	0.14 %	\$ 499,279	\$ 3,943,084
2014	N/A	6,149,608	0.24	739,056	6,888,664
2015	N/A	6,887,258	0.25	266,949	7,154,207
2016	N/A	10,966,837	0.39	228,057	11,194,894
2017	N/A	11,863,776	0.39	2,027,506	13,891,282
2018	N/A	13,290,145	0.45	2,383,184	15,673,329
2019	N/A	14,009,075	0.45	2,455,173	16,464,248
2020	N/A	11,241,801	0.32	772,391	12,014,192
2021	N/A	11,724,345	0.31	16,296,899	28,021,244
2022	N/A	8,264,936	0.20	764,731	9,029,667

Deductions by Type - OPEB

For the Last Ten Fiscal Years Ended June 30:

Retirement Health Insurance Account

Fiscal Year	Benefits¹	Administrative Expenses	Refunds	Total
2013	\$ 30,777,470	\$ 1,149,475	N/A	\$ 31,926,945
2014	34,112,567	1,044,937	N/A	35,157,504
2015	31,922,820	1,279,427	N/A	33,202,247
2016	33,602,540	1,256,017	N/A	34,858,557
2017	31,186,802	1,288,059	N/A	32,474,861
2018	32,503,140	1,281,744	N/A	33,784,884
2019	32,234,400	1,312,229	N/A	33,546,629
2020	31,827,780	1,272,953	N/A	33,100,733
2021	31,334,950	1,287,002	N/A	32,621,952
2022	30,609,060	1,604,127	N/A	32,213,187

Retiree Health Insurance Premium Account

Fiscal Year	Benefits¹	Administrative Expenses	Refunds	Total
2013	\$ 4,093,736	\$ 169,137	N/A	\$ 4,262,873
2014	4,925,743	170,901	N/A	5,096,644
2015	4,230,808	188,598	N/A	4,419,406
2016	4,682,975	259,850	N/A	4,942,825
2017	4,327,944	285,895	N/A	4,613,839
2018	4,659,536	277,596	N/A	4,937,132
2019	4,486,752	318,425	N/A	4,805,177
2020	4,112,640	252,995	N/A	4,365,635
2021	3,672,820	292,231	N/A	3,965,051
2022	3,432,236	665,569	N/A	4,097,805

¹ Benefit payments paid by RHIA and RHIPA consisted of Healthcare Premium Subsidies exclusively.

Changes in Fiduciary Net Position - OPEB
For the Last Ten Fiscal Years Ended June 30:

Retirement Health Insurance Account

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2013	\$ 82,930,771	\$ 31,926,945	\$ 51,003,826	\$ 266,579,777	\$ 317,583,603
2014	104,447,615	35,157,504	69,290,111	317,583,603	386,873,714
2015	69,255,313	33,202,247	36,053,066	386,873,714	422,926,780
2016	48,834,515	34,858,557	13,975,958	422,926,780	436,902,738
2017	107,351,725	32,474,861	74,876,864	436,902,738	511,779,602
2018	98,867,130	33,784,884	65,082,246	511,779,602	576,861,848
2019	85,574,713	33,546,629	52,028,084	576,861,848	628,889,932
2020	14,954,896	33,100,733	(18,145,837)	628,889,932	610,744,095
2021	174,785,566	32,621,952	142,163,614	610,744,095	752,907,709
2022	10,005,165	32,213,187	(22,208,022)	752,907,709	730,699,687

Retiree Health Insurance Premium Account

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2013	\$ 3,943,084	\$ 4,262,873	\$ (319,789)	\$ 4,559,382	\$ 4,239,593
2014	6,888,664	5,096,644	1,792,020	4,239,593	6,031,613
2015	7,154,207	4,419,406	2,734,801	6,031,613	8,766,414
2016	11,194,894	4,942,825	6,252,069	8,766,414	15,018,483
2017	13,891,282	4,613,839	9,277,443	15,018,483	24,295,926
2018	15,673,329	4,937,132	10,736,197	24,295,926	35,032,123
2019	16,464,248	4,805,177	11,659,071	35,032,123	46,691,194
2020	12,014,192	4,365,635	7,648,557	46,691,194	54,339,751
2021	28,021,244	3,965,051	24,056,193	54,339,751	78,395,944
2022	9,029,667	4,097,805	4,931,862	78,395,944	83,327,806

Statistical Section

Additions by Source - Retirement Programs For the Last Ten Years Ended December 31¹:

Defined Benefit Pension Plan

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2012	\$ 14,148,372	\$ 862,934,319	10.99 %	\$ 7,201,022,711	\$ 8,078,105,402
2013	18,664,061	1,496,033,607	17.68	8,595,803,270	10,110,500,938
2014	13,200,528	937,788,619	10.48	4,342,718,450	5,293,707,597
2015	14,362,049	1,127,799,421	12.25	1,232,493,098	2,374,654,568
2016	13,085,105	976,297,293	10.17	4,290,378,888	5,279,761,286
2017	14,668,384	1,179,420,962	10.77	9,343,076,932	10,537,166,278
2018	10,447,081	1,745,401,831	16.96	226,842,118	1,982,691,030
2019	11,373,682	2,019,260,325	18.27	8,608,031,425	10,638,665,432
2020	9,600,323	2,094,082,795	17.72	5,070,001,230	7,173,684,348
2021	10,187,455	3,461,593,218	27.32	14,711,614,436	18,183,395,109

Employee Pension Stability Accounts

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2020	\$ 62,303,384	N/A	N/A %	\$ 5,109,277	\$ 67,412,661
2021	162,137,599	N/A	N/A	44,889,059	207,026,659

Oregon Public Service Retirement Plan Individual Account Program

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2012	\$ 499,094,923	N/A	N/A %	\$ 623,896,684	\$ 1,122,991,607
2013	542,566,655	N/A	N/A	814,928,040	1,357,494,695
2014	511,048,423	N/A	N/A	450,087,155	961,135,578
2015	596,936,756	N/A	N/A	140,226,970	737,163,726
2016	597,188,543	N/A	N/A	518,172,223	1,115,360,766
2017	613,683,342	N/A	N/A	1,213,845,362	1,827,528,704
2018	638,930,679	N/A	N/A	(61,712,368)	577,218,311
2019	687,121,432	N/A	N/A	1,247,407,081	1,934,528,513
2020	635,159,734	N/A	N/A	825,974,438	1,461,134,172
2021	600,925,794	N/A	N/A	1,887,877,326	2,488,803,120

Deferred Compensation Plan

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2012	\$ 78,115,678	N/A	N/A %	\$ 105,067,553	\$ 183,183,231
2013	88,901,454	N/A	N/A	207,310,080	296,211,534
2014	92,495,435	N/A	N/A	102,188,822	194,684,257
2015	97,373,493	N/A	N/A	15,087,160	112,460,653
2016	109,040,225	N/A	N/A	83,913,037	192,953,262
2017	120,454,924	N/A	N/A	212,359,507	332,814,431
2018	144,365,735	N/A	N/A	62,553,479	206,919,214
2019	144,923,289	N/A	N/A	217,040,897	361,964,186
2020	145,621,685	N/A	N/A	386,028,153	531,649,838
2021	167,423,263	N/A	N/A	286,846,437	454,269,699

¹Calendar year-end information is provided because earnings are distributed as of December 31.

Deductions by Type - Retirement Programs
For the Last Ten Years Ended December 31¹:

Defined Benefit Pension Plan

Calendar Year	Benefits	Administrative Expenses	Refunds	Intracount Transfers	Total
2012	\$ 3,351,430,408	\$ 31,807,897	\$ 17,970,250	-	\$ 3,401,208,555
2013	3,708,827,767	34,271,919	25,529,913	-	3,768,629,599
2014	3,888,166,333	35,187,183	17,850,587	-	3,941,204,103
2015	4,068,416,728	37,333,754	15,932,985	-	4,121,683,467
2016	4,248,984,127	41,936,746	14,931,267	-	4,305,852,140
2017	4,495,375,698	41,149,466	14,404,077	-	4,550,929,241
2018	4,737,604,779	36,802,183	13,668,587	-	4,788,075,549
2019	4,908,681,141	44,666,591	10,664,553	-	4,964,012,285
2020	5,137,911,088	56,720,875	17,513,367	(741,278)	5,211,404,052
2021	5,340,818,040	60,156,727	15,529,724	(9,927,633)	5,406,576,858

Employee Pension Stability Accounts

Calendar Year	Benefits	Administrative Expenses	Refunds	Intracount Transfers	Total
2020	\$ -	\$ 240	\$ N/A	\$ 741,278	\$ 741,518
2021	-	504		9,927,633	9,928,137

Oregon Public Service Retirement Plan
Individual Account Program

Calendar Year	Benefits	Administrative Expenses	Refunds	Intracount Transfers	Total
2012	\$ 218,180,975	\$ 5,528,973	\$ N/A	\$ N/A	\$ 223,709,948
2013	301,297,929	7,164,598	N/A	N/A	308,462,527
2014	332,722,945	7,315,352	N/A	N/A	340,038,297
2015	343,688,428	7,746,075	N/A	N/A	351,434,503
2016	386,689,618	9,106,820	N/A	N/A	395,796,438
2017	497,309,999	9,958,373	N/A	N/A	507,268,372
2018	508,929,082	13,454,299	N/A	N/A	522,383,381
2019	545,539,814	12,321,208	N/A	N/A	557,861,022
2020	655,602,622	12,255,726	N/A	N/A	667,858,348
2021	708,475,122	12,572,339	N/A	N/A	721,047,461

Deferred Compensation Plan

Calendar Year	Benefits	Administrative Expenses	Refunds	Intracount Transfers	Total
2012	\$ 65,498,582	\$ 783,755	\$ N/A	\$ N/A	\$ 66,282,337
2013	79,075,903	982,625	N/A	N/A	80,058,528
2014	92,995,075	998,023	N/A	N/A	93,993,098
2015	82,398,740	1,050,769	N/A	N/A	83,449,509
2016	81,073,521	1,374,662	N/A	N/A	82,448,183
2017	101,419,280	1,390,830	N/A	N/A	102,810,110
2018	131,272,865	1,483,023	N/A	N/A	132,755,888
2019	120,101,006	2,705,025	N/A	N/A	122,806,031
2020	129,947,918	2,007,705	N/A	N/A	131,955,623
2021	145,991,333	2,154,367	N/A	N/A	148,145,700

¹Calendar year-end information is provided because earnings are distributed as of December 31.

Statistical Section

Changes in Fiduciary Net Position - Retirement Programs For the Last Ten Years Ended December 31¹:

Defined Benefit Pension Plan

Calendar Year	Additions	Deductions ²	Net Change	Net Position ³	
				Beginning of Year	End of Year
2012	\$ 8,078,105,402	\$ 3,401,208,555	\$ 4,676,896,847	\$ 51,144,650,137	\$ 55,821,546,984
2013	10,110,500,938	3,768,629,599	6,341,871,339	55,821,546,984	62,163,418,323
2014	5,293,707,597	3,941,204,103	1,352,503,494	62,163,400,642	63,515,904,136
2015	2,374,654,568	4,116,424,013	(1,741,769,445)	63,515,904,136	61,774,134,691
2016	5,279,761,286	4,305,852,140	973,909,146	61,774,134,691	62,748,043,837
2017	10,537,166,278	4,551,871,595	5,985,294,683	62,748,043,837	68,733,338,520
2018	1,982,691,030	4,788,075,549	(2,805,384,519)	68,733,338,520	65,927,954,001
2019	10,638,665,432	4,964,012,285	5,674,653,147	65,927,954,001	71,602,607,148
2020	7,173,684,348	5,211,404,052	1,962,280,296	71,602,607,148	73,564,887,444
2021	18,183,395,109	5,406,576,858	12,776,818,251	73,564,887,444	86,341,705,695

Employee Pension Stability Account

Calendar Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2020	\$ 67,412,661	\$ 741,518	\$ 66,671,143	\$ -	\$ 66,671,143
2021	207,026,659	9,928,137	197,098,521	66,671,143	263,769,664

Oregon Public Service Retirement Plan Individual Account Program

Calendar Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2012	\$ 1,122,991,607	\$ 223,709,948	\$ 899,281,659	\$ 3,965,399,708	\$ 4,864,681,367
2013	1,357,494,695	308,462,527	1,049,032,168	4,864,681,367	5,913,713,535
2014	961,135,579	340,038,297	621,097,282	5,913,713,535	6,534,810,817
2015	737,163,726	351,434,503	385,729,223	6,534,810,817	6,920,540,040
2016	1,115,360,766	395,796,438	719,564,328	6,920,540,040	7,640,104,368
2017	1,827,528,704	507,268,372	1,320,260,332	7,640,104,368	8,960,364,700
2018	577,218,311	522,383,381	54,834,930	8,960,364,700	9,015,199,630
2019	1,934,528,513	557,861,022	1,376,667,491	9,015,199,630	10,391,867,121
2020	1,461,134,172	667,858,348	793,275,824	10,391,867,121	11,185,142,945
2021	2,488,803,120	721,047,461	1,767,755,659	11,185,142,945	12,952,898,604

Deferred Compensation Plan

Calendar Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2012	\$ 183,183,231	\$ 66,282,337	\$ 116,900,894	\$ 1,069,191,072	\$ 1,186,091,966
2013	296,211,535	80,058,528	216,153,007	1,186,091,966	1,402,244,973
2014	194,684,257	93,993,098	100,691,159	1,402,244,973	1,502,936,132
2015	112,460,653	83,449,509	29,011,144	1,502,936,132	1,531,947,276
2016	192,953,262	82,448,183	110,505,079	1,531,947,276	1,642,452,355
2017	332,814,431	102,810,110	230,004,321	1,642,452,355	1,872,456,676
2018	206,919,214	132,755,888	74,163,326	1,872,456,676	1,946,620,002
2019	361,964,186	122,806,031	239,158,155	1,946,620,002	2,185,778,157
2020	531,649,838	131,955,623	399,694,215	2,185,778,157	2,585,472,372
2021	454,269,699	148,145,700	306,124,000	2,585,472,372	2,891,596,372

¹Calendar year-end information is provided because earnings are distributed as of December 31.

²Balances are restated for calendar years 2012 to 2015 due to prior period adjustments.

³Balances restated for calendar years 2013, 2014, and 2017 to correct amounts.

Additions by Source - OPEBFor the Last Ten Years Ended December 31¹:**Retirement Health Insurance Account**

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2012	\$ N/A	\$ 48,118,569	0.38	\$ 35,088,054	\$ 83,206,623
2013	N/A	47,729,940	0.59	46,420,994	94,150,934
2014	N/A	49,466,294	0.56	25,754,870	75,221,164
2015	N/A	48,846,297	0.55	7,995,269	56,841,566
2016	N/A	48,339,520	0.59	31,003,380	79,342,900
2017	N/A	49,167,576	0.50	72,787,020	121,954,596
2018	N/A	49,483,717	0.48	1,768,069	51,251,786
2019	N/A	30,090,293	0.27	76,707,399	106,797,692
2020	N/A	3,000,272	0.03	46,001,641	49,001,913
2021	N/A	2,605,114	0.02	132,841,555	135,446,669

Retiree Health Insurance Premium Account

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2012	\$ N/A	\$ 3,450,509	0.10	\$ 557,438	\$ 4,007,947
2013	N/A	4,708,305	0.15	588,465	5,296,770
2014	N/A	6,378,015	0.19	361,915	6,739,930
2015	N/A	8,747,711	0.24	131,852	8,879,563
2016	N/A	11,621,895	0.25	933,866	12,555,761
2017	N/A	12,646,688	0.40	2,915,300	15,561,988
2018	N/A	13,587,039	0.45	(36,367)	13,550,672
2019	N/A	12,766,276	0.37	5,311,670	18,077,946
2020	N/A	11,367,169	0.31	4,470,919	15,838,088
2021	N/A	10,144,057	0.26	13,179,625	23,323,682

¹Calendar year-end information is provided because earnings are distributed as of December 31.

Deductions by Type - OPEB

For the Last Ten Years Ended December 31¹:

Retirement Health Insurance Account

Calendar Year	Administrative			Total
	Benefits	Expenses	Refunds	
2012	\$ 30,375,640	\$ 837,282	N/A	\$ 31,212,922
2013	31,132,920	1,095,853	N/A	32,228,773
2014	31,636,379	1,167,459	N/A	32,803,838
2015	32,273,928	1,223,215	N/A	33,497,143
2016	32,385,680	1,206,654	N/A	33,592,334
2017	32,438,822	1,275,297	N/A	33,714,119
2018	32,422,620	1,374,059	N/A	33,796,679
2019	32,074,620	1,311,208	N/A	33,385,828
2020	31,655,700	1,277,801	N/A	32,933,501
2021	31,052,710	1,413,606	N/A	32,466,316

Retiree Health Insurance Premium Account

Calendar Year	Administrative			Total
	Benefits	Expenses	Refunds	
2012	\$ 3,968,267	\$ 134,246	\$ N/A	\$ 4,102,513
2013	4,323,159	172,485	N/A	4,495,644
2014	4,615,612	180,524	N/A	4,796,136
2015	4,680,196	214,500	N/A	4,894,696
2016	4,340,503	288,507	N/A	4,629,010
2017	4,578,655	273,005	N/A	4,851,660
2018	4,608,776	290,534	N/A	4,899,310
2019	4,365,646	297,957	N/A	4,663,603
2020	3,867,431	280,878	N/A	4,148,309
2021	3,553,564	436,931	N/A	3,990,495

¹Calendar year-end information is provided because earnings are distributed as of December 31.

Changes in Fiduciary Net Position - OPEB
For the Last Ten Years Ended December 31¹:

Retirement Health Insurance Account

Calendar Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2012	\$ 83,206,623	\$ 31,212,922	\$ 51,993,701	\$ 239,610,514	\$ 291,604,215
2013	94,150,934	32,228,773	61,922,161	291,604,215	353,526,376
2014	75,221,164	32,803,838	42,417,326	353,526,376	395,943,702
2015	56,841,566	33,497,143	23,344,423	395,943,702	419,288,125
2016	79,342,900	33,592,334	45,750,566	419,288,125	465,038,691
2017	121,954,596	33,714,119	88,240,477	465,038,691	553,279,168
2018	51,251,786	33,796,679	17,455,107	553,279,168	570,734,275
2019	106,797,692	33,385,828	73,411,864	570,734,275	644,146,139
2020	49,001,913	32,933,501	16,068,412	644,146,139	660,214,551
2021	135,446,669	32,466,316	102,980,354	660,214,551	763,194,905

Retiree Health Insurance Premium Account

Calendar Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2012	\$ 4,007,946	\$ 4,102,513	\$ (94,567)	\$ 4,539,401	\$ 4,444,834
2013	5,296,770	4,495,644	801,126	4,444,834	5,245,960
2014	6,739,930	4,796,136	1,943,794	5,245,960	7,189,754
2015	8,879,563	4,894,696	3,984,867	7,189,754	11,174,621
2016	12,555,761	4,629,010	7,926,751	11,174,621	19,101,372
2017	15,561,988	4,851,660	10,710,328	19,101,372	29,811,700
2018	13,550,672	4,899,310	8,651,362	29,811,700	38,463,062
2019	18,077,946	4,663,603	13,414,343	38,463,062	51,877,405
2020	15,838,088	4,148,309	11,689,779	51,877,405	63,567,184
2021	23,323,682	3,990,495	19,333,187	63,567,184	82,900,371

¹Calendar year-end information is provided because earnings are distributed as of December 31.

Statistical Section

Schedule of Earnings and Crediting at December 31¹:

Calendar Year	Tier One Earnings Available for Crediting	Credited			Variable Earnings/ (Loss) Credited	Individual Account Program
		Tier One	Tier Two			
2012	14.53 %	8.00 %	14.68 %	18.43 %	14.09 %	
2013	15.76	8.00	15.62	25.74	15.59	
2014	7.24	7.75	7.24 ²	4.29 ³	7.05	
2015	1.87	7.75	1.87	(1.61)	1.85	
2016	7.15	7.50	7.15	8.76	7.13	
2017	15.23	7.50	15.23	26.48	14.72	
2018	0.23	7.20	0.23	(10.03)	(0.63)	
2019	13.27	7.20	13.27	28.80	13.35	
2020	7.18	7.20	7.18	11.77	8.37	
2021	20.14	7.20	20.14	18.88	16.18	

¹Calendar year-end information is provided because earnings are credited as of December 31.

²Earnings rate includes allocation from settlement of *Murray v. PERB* litigation.

³Earnings rate includes allocation from settlement of *White, et al. v. PERB* litigation.

Schedule of Benefit Expenses by Type - Defined Benefit Pension Plan

For the Fiscal Years Ended June 30:

Fiscal Year	Service Benefits	Disability Benefits		Retirement Benefit Totals	Death Benefits	Refunds		Total
		Duty	Non-Duty			Normal	Death	
2013	\$3,422,618,167	\$17,242,718	\$111,616,337	\$3,551,477,222	\$4,582,777	\$10,074,038	\$7,365,530	\$3,573,499,567
2014	3,701,010,685	17,739,646	113,317,283	3,832,067,614	5,802,797	13,614,833	11,945,261	3,863,430,505
2015	3,790,050,384	17,943,338	113,129,130	3,921,122,852	6,044,180	7,283,720	9,197,495	3,943,648,247
2016	4,045,951,252	18,896,881	118,534,433	4,183,382,566	9,925,146	6,342,385	6,812,193	4,206,462,290
2017	4,204,153,060	18,965,495	118,479,583	4,341,598,137	4,684,598	6,589,962	9,371,782	4,362,244,479
2018	4,497,671,956	19,356,946	120,819,135	4,637,868,037	4,849,807	5,145,792	8,730,502	4,656,594,138
2019	4,666,793,109	20,360,781	123,821,174	4,810,975,064	4,083,536	3,356,265	8,547,377	4,826,962,242
2020	4,894,294,688	21,041,469	124,420,605	5,039,756,762	6,174,392	8,105,287	10,750,010	5,064,786,451
2021	5,084,114,373	21,560,657	126,540,003	5,232,215,032	4,922,561	4,721,963	7,212,502	5,249,072,058
2022	5,312,844,561	22,366,119	127,272,097	5,462,482,777	5,732,332	4,984,900	9,908,305	5,483,108,314

Schedule of Average OPEB Benefits for Retirement Health Insurance Account¹

For the Fiscal Year Ended June 30, 2022:

Years Credited Service	8+
Average Monthly Benefit	\$60.00
Final Average Salary	N/A
Number of Active Retirees	41,718

Schedule of Average OPEB Benefits for Retiree Health Insurance Premium Account¹

For the Fiscal Year Ended June 30, 2022:

	Years Credited Service						Total
	8 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +	
Average Monthly Benefit	\$ 223	\$ 267	\$ 311	\$ 356	\$ 400	\$ 445	\$ 415
Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of Active Retirees	6	11	31	71	151	337	607

¹Effective years of retirement and final average salary are not available for OPEB.

Schedule of Average Defined Benefit Pension Payments

Retirement Effective Dates	Years Credited Service							Total
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
2013 Average Monthly Benefit	\$778	\$1,168	\$1,622	\$2,109	\$2,830	\$4,156	\$5,887	\$2,834
Final Average Salary	\$3,705	\$3,839	\$4,459	\$5,028	\$5,931	\$6,656	\$6,956	\$5,420
Number of Active Retirees	371	917	1,058	1,079	1,319	1,141	934	6,819
2014 Average Monthly Benefit	\$818	\$1,161	\$1,527	\$1,945	\$2,710	\$3,909	\$5,703	\$2,671
Final Average Salary	\$3,577	\$3,648	\$4,355	\$5,009	\$5,911	\$6,403	\$6,946	\$5,306
Number of Active Retirees	388	1,008	1,100	1,204	1,408	1,219	926	7,253
2015 Average Monthly Benefit	\$665	\$905	\$1,356	\$1,887	\$2,536	\$3,733	\$5,588	\$2,454
Final Average Salary	\$3,922	\$3,818	\$4,529	\$5,177	\$5,777	\$6,549	\$7,350	\$5,415
Number of Active Retirees	292	819	983	1,090	1,139	1,091	639	6,053
2016 Average Monthly Benefit	\$764	\$948	\$1,338	\$1,905	\$2,519	\$3,696	\$5,545	\$2,548
Final Average Salary	\$3,579	\$3,801	\$4,525	\$5,213	\$5,893	\$6,832	\$7,349	\$5,547
Number of Active Retirees	328	844	985	1,116	1,234	1,290	800	6,597
2017 Average Monthly Benefit	\$735	\$1,058	\$1,395	\$1,874	\$2,653	\$3,668	\$5,632	\$2,661
Final Average Salary	\$3,658	\$3,876	\$4,549	\$5,432	\$6,214	\$7,033	\$8,112	\$5,837
Number of Active Retirees	371	893	1,075	1,182	1,170	1,372	1,031	7,094
2018 Average Monthly Benefit	\$814	\$1,071	\$1,356	\$1,826	\$2,630	\$3,562	\$5,296	\$2,551
Final Average Salary	\$3,923	\$3,988	\$4,393	\$5,437	\$6,390	\$7,077	\$8,039	\$5,862
Number of Active Retirees	346	939	1,052	1,337	1,216	1,492	952	7,334
2019 Average Monthly Benefit	\$857	\$985	\$1,286	\$1,870	\$2,685	\$3,633	\$5,164	\$2,423
Final Average Salary	\$4,007	\$3,946	\$4,560	\$5,590	\$6,541	\$7,418	\$8,347	\$5,902
Number of Active Retirees	407	963	1,009	1,204	1,106	1,265	736	6,690
2020 Average Monthly Benefit	\$809	\$977	\$1,212	\$1,780	\$2,733	\$3,793	\$5,068	\$2,484
Final Average Salary	\$3,917	\$4,153	\$4,559	\$5,465	\$6,858	\$7,919	\$8,548	\$6,146
Number of Active Retirees	398	892	1,096	1,140	1,254	1,224	888	6,892
2021 Average Monthly Benefit	\$703	\$999	\$1,248	\$1,809	\$2,680	\$3,796	\$4,917	\$2,466
Final Average Salary	\$4,025	\$4,117	\$4,620	\$5,709	\$6,781	\$8,040	\$8,213	\$6,171
Number of Active Retirees	403	843	907	1,113	1,246	1,160	807	6,479
2022 Average Monthly Benefit	\$748	\$955	\$1,192	\$1,648	\$2,680	\$3,817	\$4,851	\$2,468
Final Average Salary	\$4,696	\$4,429	\$5,033	\$5,582	\$6,950	\$8,194	\$8,687	\$6,461
Number of Active Retirees	376	917	1,069	1,185	1,355	1,300	976	7,178

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Schedule of Benefit Recipients by Benefit Type For the Fiscal Year Ended June 30, 2022

Monthly Benefit Amount	Number of Retirees	Type of Retirement *					Refund Annuity	Annuity Options **				Lump-Sum Options **		
		1	2	3	4	5		1	2	3	4	1	2	3
\$ 1-500	17,140	13,838	43	76	2,671	512	927	6,096	5,372	943	739	1,470	1,296	297
501-1,000	22,045	18,349	75	414	2,453	754	1,860	7,911	7,360	1,795	1,212	891	799	217
1,001-1,500	18,503	15,407	74	519	1,841	662	1,559	6,192	6,668	1,679	891	674	653	187
1,501-2,000	15,965	13,365	61	495	1,537	507	1,330	4,890	6,025	1,625	777	530	639	149
2,001-2,500	14,153	12,096	55	469	1,142	391	1,193	4,165	5,407	1,481	629	523	619	136
2,501-3,000	12,242	10,617	64	360	933	268	1,037	3,381	4,831	1,268	518	458	636	113
3,001-3,500	10,423	9,164	45	293	721	200	837	2,831	4,258	1,237	382	336	443	99
3,501-4,000	9,033	8,097	57	185	577	117	709	2,483	3,758	1,138	357	203	321	64
4,001-4,500	7,946	7,218	42	136	484	66	628	2,090	3,537	1,024	311	138	170	48
4,501-5,000	6,777	6,254	29	92	367	35	452	1,778	3,101	944	281	87	101	33
5,001-5,500	5,997	5,600	18	49	297	33	409	1,557	2,838	852	201	38	75	27
5,501-6,000	4,995	4,622	12	43	299	19	349	1,274	2,334	774	165	27	58	14
6,000+	15,107	14,120	37	59	844	47	837	3,362	7,325	2,907	474	62	115	25
Totals	160,326	138,747	612	3,190	14,166	3,611	12,127	48,010	62,814	17,667	6,937	5,437	5,925	1,409

* Type of Retirement

- 1 - Normal
- 2 - Duty Disability
- 3 - Non-Duty Disability
- 4 - Survivor Payment
- 5 - Alternate Payee

** Annuity and Lump-Sum Options

- 1 - No benefit for beneficiary
- 2 - Beneficiary receives same monthly benefit for life
- 3 - Beneficiary receives half the monthly benefit for life
- 4 - 15-year certain

Schedule of Retirement System Membership at December 31:

Five Year Increments	Five Year Increments								
	1985	1990	1995	2000	2005	2010	2015	2020	
State Agencies	37,824	46,187	45,068	42,434	38,076	48,018	47,331	50,261	
School Districts	47,590	48,144	55,734	63,133	56,756	79,798	66,184	72,508	
Political Subdivisions	26,238	33,177	40,635	53,291	50,085	65,332	54,662	57,889	
Inactive Members	15,920	23,225	32,033	44,830	47,289	40,481	42,849	47,565	
Total Non-Retired	127,572	150,733	173,470	203,688	192,206	233,629	211,026	228,223	
Retired Members and Beneficiaries	46,181	55,540	64,796	82,355	101,213	110,573	136,298	156,277	
Total Membership	173,753	206,273	238,266	286,043	293,419	344,202	347,324	384,500	
Administrative Expense ¹	\$2,905,072	\$8,901,091	\$13,500,677	\$24,358,550	\$40,056,600	\$38,029,071	\$47,934,435	\$72,956,312	
Pension Roll (one month)	\$18,083,614	\$33,175,888	\$58,457,531	\$122,467,087	\$202,633,214	\$265,490,496	\$333,044,107	\$408,717,504	

¹Fiduciary Funds only.

Schedule of Retirement System Membership at June 30:

Five Year Increments	2014	2015	2016	2017	2018	2019	2020	2021	2022
	State Agencies	45,774	47,620	47,868	48,099	48,320	49,699	49,506	51,340
School Districts	64,824	66,434	68,648	69,510	71,238	73,164	72,258	71,894	73,911
Political Subdivisions ²	54,376	54,536	55,160	55,696	56,439	53,464	56,913	56,864	56,247
Inactive Members	43,646	44,786	45,925	45,709	45,993	48,786	46,530	48,384	51,814
Total Non-Retired	208,620	213,376	217,601	219,014	221,990	225,113	225,207	228,482	232,754
Retired Members and Beneficiaries	129,138	132,506	136,435	136,435	145,863	149,386	153,622	156,500	160,326
Total Membership	337,758	345,882	354,036	355,449	367,853	374,499	378,829	384,982	393,080
Administrative Expense ¹	\$40,395,370	\$45,791,942	\$51,763,886	\$55,931,659	\$53,090,243	\$54,880,713	\$63,911,998	\$75,910,699	\$74,959,193
Pension Roll (one month)	\$303,834,899	\$317,090,746	\$337,405,252	\$355,414,652	\$376,397,537	\$382,187,402	\$399,447,944	\$416,186,453	\$432,881,154

¹Fiduciary Funds only.

²Includes Community Colleges

**Schedule of Principal Participating Employers
Current Fiscal Year and Nine Years Ago**

	2022			2013		
	Number of Current Employees	Rank	Percent of Total System	Number of Current Employees	Rank	Percent of Total System
State of Oregon	50,782	1	28.07 %	45,019	1	27.58 %
Portland Public Schools	5,983	2	3.31	5,279	3	3.23
Portland, City of	5,246	3	2.90	4,390	5	2.69
Salem-Keizer Public Schools	5,207	4	2.88	4,491	4	2.75
Multnomah County	4,984	5	2.75	4,394	6	2.69
Beaverton School District	4,596	6	2.54	3,907	7	2.39
Oregon Health & Science University	3,564	7	1.97	5,081	2	3.11
Hillsboro School District #1J	2,423	8	1.34	2,329	8	1.43
Portland Community College	2,134	9	1.18	2,421	9	1.48
Clackamas County	2,118	10	1.17	1,934	10	1.18
All Others*	93,903		51.90	84,014		51.47
Total	180,940		100.00 %	163,259		100.00 %

* "All Others" consisted of:

Counties	13,780	7.62 %	10,547	6.46 %
Municipalities	13,391	7.41	12,317	7.55
School Districts	53,584	29.62	47,291	28.97
Community Colleges	5,010	2.77	6,058	3.71
Other Political Subdivisions	8,138	4.50	7,801	4.78
Total All Others	93,903	51.90 %	84,014	51.47 %

Statistical Section

Schedule of Participating Employers (898)

State (108)

Appraiser Certification and Licensure Board
Board of Accountancy
Board of Architect Examiners
Board of Chiropractic Examiners
Board of Examiners for Engineering and Land Surveying
Board of Geologist Examiners
Board of Optometry
Board of Parole and Post-Prison Supervision
Board of Pharmacy
Bureau of Labor and Industries
Commission on Indian Services
Commission on Judicial Fitness and Disability
Construction Contractors Board
Department of Administrative Services
Department of Agriculture
Department of Aviation
Department of Consumer and Business Services
Department of Corrections
Department of Education
Department of Energy
Department of Environmental Quality
Department of Human Services
Department of Justice
Department of Land Conservation and Development
Department of Military-Federal Employees
Department of Revenue
Department of State Lands
Department of State Police
Department of Transportation
Department of Veterans' Affairs
Higher Education Coordinating Commission
District Attorneys Department
Eastern Oregon University
Employment Department
Employment Relations Board
Forestry Department
Geology and Mineral Industries
Health Related Licensing Boards
Judges PERS
Judicial Department
Land Use Board of Appeals
Landscape Contractors Board
Legislative Administration Board (Committee)
Legislative Assembly
Legislative Committees
Legislative Fiscal Office
Legislative Policy & Research Committee
Long Term Care Ombudsman
Mental Health Regulatory Agency
Military Department
Office of Legislative Counsel

Office of the Governor
Office of the State Treasurer
Oregon Advocacy Commissions Office
Oregon Beef Council
Oregon Board of Dentistry
Oregon Board of Massage Therapists
Oregon Board of Medical Examiners
Oregon Business Development Department
Oregon Commission for the Blind
Oregon Corrections Enterprises
Oregon Criminal Justice Commission
Oregon Dairy Products Commission
Oregon Department of Fish and Wildlife
Oregon Dungeness Crab Commission
Oregon Education Investment Board
Oregon Film and Video
Oregon Forest Resources Institute
Oregon Government Ethics Commission
Oregon Health Authority
Oregon Hop Commission
Oregon Housing and Community Services
Oregon Institute of Technology
Oregon Liquor & Cannabis Commission
Oregon Parks and Recreation Department
Oregon Patient Safety Commission
Oregon Potato Commission
Oregon Racing Commission
Oregon Salmon Commission
Oregon State Bar
Oregon State Bar Professional Liability Fund
Oregon State Board of Nursing
Oregon State Library
Oregon State University
Oregon Tourism Commission
Oregon Trawl Commission
Oregon Watershed Enhancement Board
Oregon Wheat Commission
Oregon Youth Authority
Physical Therapist Licensing Board
Portland State University
Psychiatric Security Review Board
Public Defense Services Commission
Public Employees Retirement System
Public Safety Standards and Training
Public Utility Commission
Real Estate Agency
Secretary of State
Southern Oregon University
State Accident Insurance Fund
State Board of Clinical Social Workers
State Board of Tax Practitioners
State Lottery Commission
State Marine Board
Teacher Standards and Practices Commission
Travel Information Council
University of Oregon
Water Resources Department
Western Oregon University

Political Subdivisions (479)

Adair RFPD
Adair Village, City of
Albany, City of
Amity Fire District
Amity, City of
Applegate Valley RFPD 9
Arch Cape Water/Sanitary District
Ashland Parks Commission
Ashland, City of
Astoria, City of
Athena, City of
Aumsville RFPD
Aumsville, City of
Aurora RFPD
Aurora, City of
Baker County
Baker County Library District
Baker Valley Irrigation District
Baker City, City of
Bandon, City of
Banks Fire District 13
Banks, City of
Bay City, City of
Beaverton, City of
Bend Metropolitan Park and Recreation District
Bend, City of
Benton County
Black Butte Ranch RFPD
Black Butte Ranch Service District
Boardman RFPD
Boardman, City of
Brookings, City of
Brownsville RFPD
Burns, City of
Burnt River Irrigation District
Butte Falls, Town of
Canby FPD 62
Canby Utility Board
Canby, City of
Cannon Beach RFPD
Cannon Beach, City of
Canyon City, Town of
Canyonville, City of
CareOregon
Carlton, City of
Cascade Locks, City of
Cave Junction, City of
Central Cascades Fire and EMS
Central Oregon Coast Fire and Rescue District
Central Oregon Intergovernmental Council
Central Oregon Irrigation District
Central Oregon Regional Housing Authority
Central Point, City of
Charleston RFPD
Chetco Community Public Library Board
Chiloquin, City of
Chiloquin-Agency Lake RFPD

Clackamas County	East Umatilla County RFPD	Ice Fountain Water District
Clackamas County Fair	Echo, City of	Idanha-Detroit Rural Fire Protection District
Clackamas County Fire District 1	Elgin, City of	Illinois Valley RFPD
Clackamas County Vector Control District	Elkton, City of	Imbler RFPD
Clackamas River Water	Enterprise, City of	Imbler, City of
Clackamas River Water Providers	Estacada Cemetery Maintenance District	Independence, City of
Clatskanie Library District	Estacada RFD 69	Irrigon, City of
Clatskanie People's Utility District	Estacada, City of	Jackson County
Clatskanie RFPD	Eugene Water and Electric Board	Jackson County Fire District 3
Clatskanie, City of	Eugene, City of	Jackson County Fire District 4
Clatsop County	Fairview Water District	Jackson County Fire District 5
Clean Water Services	Fairview, City of	Jackson County Fire District 6
Cloverdale RFPD	Falls City, City of	Jackson County Vector Control District
Coburg RFPD	Farmers Irrigation District	Jacksonville, City of
Coburg, City of	Fern Ridge Community Library	Jefferson County
Colton RFPD 70	Florence, City of	Jefferson County EMS District
Columbia City, City of	Forest Grove, City of	Jefferson County Library District
Columbia County	Fossil, City of	Jefferson County RFPD 1
Columbia County 911 Communications District	Garibaldi, City of	Jefferson County SWCD
Columbia Drainage Vector Control District	Gaston RFPD	Jefferson RFPD
Columbia River Fire and Rescue	Gaston, City of	Jefferson, City of
Columbia River PUD	Gearhart, City of	John Day, City of
Community Services Consortium	Gervais, City of	Jordan Valley, City of
Condon, City of	Gilliam County	Joseph, City of
Coos Bay, City of	Gladstone, City of	Josephine County
Coos County	Glide RFPD	Juntura Road District
Coos County Airport District	Gold Beach, City of	Junction City RFPD
Coquille, City of	Gold Hill, City of	Junction City, City of
Corbett Water District	Goshen RFPD	Keizer RFPD
Cornelius, City of	Grant County	Keizer, City of
Corvallis, City of	Grant County Emergency Communications	Keno Rural Fire Protection District
Cottage Grove, City of	Grants Pass Irrigation District	King City, City of
Crescent RFPD	Grants Pass, City of	Klamath County
Creswell, City of	Greater St. Helens Aquatic District	Klamath County Emergency Communications
Crook County	Greater Toledo Pool Recreation District	Klamath County Fire District 1
Crook County RFPD 1	Green Sanitary District	Klamath Falls, City of
Crooked River Ranch RFPD	Gresham, City of	Klamath Housing Authority
Crystal Springs Water District	Halsey, City of	Klamath Vector Control District
Culver, City of	Halsey-Shedd RFPD	Knappa Svensen Burnside RFPD
Curry County	Happy Valley, City of	La Grande Rural Fire Protection District
Curry Public Library District	Harbor Water PUD	La Grande, City of
Dallas, City of	Harney County	La Pine RFPD
Dayton, City of	Harney Health District	Lafayette, City of
Depoe Bay RFPD	Harrisburg Fire and Rescue	Lake Chinook Fire And Rescue District
Depoe Bay, City of	Harrisburg, City of	Lake County
Deschutes County	Helix, City of	Lake County Library District
Deschutes Public Library District	Heppner, City of	Lake Health District
Deschutes Valley Water District	Hermiston, City of	Lake Oswego, City of
Dexter RFPD	High Desert Park and Recreation District	Lakeside Water District
Douglas County	Hillsboro, City of	Lakeside, City of
Douglas County RFPD 2	Hines, City of	Lakeview, Town of
Douglas County Soil and Water Conservation District	Hood River County	Lane Council of Governments
Drain, City of	Hood River, City of	Lane County
Dufur, City of	Hoodland RFD 74	Lane Fire Authority
Dundee, City of	Horsefly Irrigation District	League of Oregon Cities
Dunes City, City of	Housing Authority of Clackamas County	Lebanon Aquatic District
Durham, City of	Housing Authority of Jackson County	Lebanon RFPD
Eagle Point, City of	Home Forward	Lebanon, City of
East Fork Irrigation District	Hubbard RFPD	Lincoln City, City of
	Hubbard, City of	Lincoln County
	Huntington, City of	Linn County

Statistical Section

Linn-Benton Housing Authority	Netarts-Oceanside RFPD	Portland, City of
Lowell, City of	Netarts-Oceanside Sanitary District	Powers, City of
Lowell RFPD	Newberg, City of	Prairie City, City of
Lyons, City of	Newport, City of	Prineville, City of
Lyons Fire District	North Bend City Housing Authority	Rainbow Water District
Madras, City of	North Bend, City of	Rainier Cemetery District
Malheur County	North Central Public Health District	Rainier, City of
Malin, City of	North Clackamas County Water Commission	Redmond Area Park and Recreation District
Manzanita, City of	North Douglas County Fire and EMS	Redmond Fire and Rescue
Mapleton Water District	North Lincoln Fire & Rescue District 1	Redmond, City of
Marion County	Marion Area Multi-Agency Emergency Telecom	Reedsport, City of
Marion County Fire District 1	North Morrow Vector Control District	Riddle, City of
Marion County Housing Authority	North Plains, City of	Rockaway Beach, City of
Maupin, City of	North Powder, City of	Rockwood Water PUD
McKenzie RFPD	North Wasco County Parks & Recreation District	Rogue River RFPD
McMinnville Water and Light Department	Northwest Oregon Housing Authority	Rogue River Valley Irrigation District
McMinnville, City of	Northern Oregon Corrections	Rogue River, City of
Medford Irrigation District	Northwest Senior and Disability Services	Roseburg Urban Sanitary Authority
Medford Water Commission	Nyssa Road Assessment District 2	Roseburg, City of
Medford, City of	Nyssa, City of	Rural Road Assessment District 3
Merrill, City of	Oak Lodge Water Services District	Salem Housing Authority
Metolius, City of	Oakland, City of	Salem, City of
METRO	Oakridge, City of	Salmon Harbor Marina
Metropolitan Area Communication Commission	Ochoco Irrigation District	Sandy RFPD 72
Mid-Columbia Center for Living	Odell Sanitary District	Sandy, City of
Mid-Columbia Fire And Rescue	Ontario, City of	Scappoose Public Library District
Mid-Valley Behavioral Care Network	Oregon Cascades West COG	Scappoose RFPD
Mill City RFPD	Oregon City, City of	Scappoose, City of
Mill City, City of	Oregon Community College Association	Scio RFPD
Millersburg, City of	Oregon Health & Science University	Seal Rock RFPD
Millington RFPD	Oregon Municipal Electric Utilities Association	Seal Rock Water District
Milton-Freewater, City of	Oregon School Boards Association	Shady Cove, City of
Milwaukie, City of	Oregon Trail Library District	Sheridan Fire District
Mist-Birkenfeld RFPD	Owyhee Irrigation District	Sheridan, City of
Mohawk Valley RFD	Parkdale RFPD	Sherman County
Molalla RFPD 73	Pendleton, City of	Sherwood, City of
Molalla, City of	Philomath Fire and Rescue	Siletz Rural Fire Protection District
Monmouth, City of	Philomath, City of	Silver Falls Library District
Monroe RFPD	Phoenix, City of	Silverton RFPD 2
Monroe, City of	Pilot Rock, City of	Silverton, City of
Moro, City of	Pleasant Hill Goshen Fire and Rescue	Sisters and Camp Sherman RFPD
Morrow County	Pleasant Hill RFPD	Sisters, City of
Mosier Fire District	Polk County	Siuslaw Public Library District
Mt. Angel Fire District	Polk County Fire District 1	Siuslaw RFPD 1
Mt. Angel, City of	Polk Soil and Water Conservation District	South Fork Water Board
Mt. Vernon, City of	Port of Astoria	South Lane County Fire and Rescue
Mulino Water District 23	Port of Cascade Locks	South Suburban Sanitary District
Multnomah County	Port of Columbia County	Southwest Lincoln County Water District
Multnomah County Drainage District 1	Port of Coos Bay, International	Springfield, City of
Multnomah County RFPD 14	Port of Garibaldi	St. Helens, City of
Myrtle Creek, City of	Port of Hood River	Stanfield, City of
Myrtle Point, City of	Port of Newport	Stayton RFPD
Nehalem Bay Fire and Rescue	Port of Portland	Stayton, City of
Nehalem Bay Health District	Port of The Dalles	Sublimity RFPD
Nehalem Bay Wastewater Agency	Port of Tillamook Bay	Suburban East Salem Water District
Nesika Beach - Ophir Water District	Port of Umatilla	Sunrise Water Authority
Neskowin Regional Sanitary Authority	Port Orford Public Library	Sunriver Service District
Neskowin Regional Water District	Port Orford, City of	Sutherlin Water Control District
Nestucca RFPD	Portland Development Commission	Sutherlin, City of
Netarts Water District		Sweet Home Cemetery Maintenance District
		Sweet Home Fire and Ambulance District

Sutherlin, City of	Wilsonville, City of	Clackamas County ESD
Sweet Home Cemetery Maintenance District	Western Lane Ambulance District	Clackamas CSD 108
Sweet Home Fire and Ambulance District	Winchester Bay Sanitary District	Clackamas CSD 115
Sweet Home, City of	Winston, City of	Clackamas CSD 12
Talent Irrigation District	Winston-Dillard Fire District	Clackamas CSD 3
Talent, City of	Winston-Dillard Water District	Clackamas CSD 46
Tangent RFPD	Wood Village, City of	Clackamas CSD 53
Tigard, City of	Woodburn Fire District	Clackamas CSD 62
Tillamook County Emergency Communications District	Woodburn, City of	Clackamas CSD 7J
Tillamook County Soil and Water Conservation District	Wy'East Fire District	Canby School District
Tillamook Fire District	Yachats RFPD	Clackamas Charter Alliance 2
Tillamook People's Utility District	Yachats, City of	Clatskanie School District 6J
Tillamook, City of	Yamhill Communications Agency	Clatsop CSD 10
Toledo, City of	Yamhill County	Clatsop CSD 1C
Tri-City Water and Sanitary Authority	Yamhill Fire Protection District	Clatsop CSD 30
Tri-County Cooperative Weed Mgmt Area	Yamhill, City of	Clatsop CSD 8
Troutdale, City of	Yoncalla, City of	Coburg Community Charter School
Tualatin Valley Fire and Rescue		Columbia CSD 13
Tualatin Valley Irrigation District	Community Colleges (17)	Columbia CSD 47 J
Tualatin Valley Water District	Blue Mountain Community College	Columbia CSD 502
Tualatin, City of	Central Oregon Community College	Columbia Gorge Education Service District
Turner, City of	Chemeketa Community College	Condon Admin. School District 25J
Turner Fire District	Clackamas Community College	Coos CSD 13
Umatilla County	Clatsop Community College	Coos CSD 31
Umatilla County Fire District #1	Columbia Gorge Community College	Coos CSD 41
Umatilla County Soil and Water District	Klamath Community College	Coos CSD 54
Umatilla County Special Library District	Lane Community College	Coos CSD 8
Umatilla RFPD 7-405	Linn-Benton Community College	Coos CSD 9
Umatilla, City of	Mt. Hood Community College	Crater Lake Charter Academy
Umatilla-Morrow Radio and Data District	Oregon Coast Community College	Crook CSD
Vale, City of	Portland Community College	Curry CSD 17C
Valley View Cemetery Maintenance District	Rogue Community College	Curry CSD 2CJ
Veneta, City of	Southwestern Oregon Community College	Dallas Community School
Vernonia RFPD	Tillamook Bay Community College	Dayton School District 8
Vernonia, City of	Treasure Valley Community College	Desert Sky Montessori
Waldport, City of	Umpqua Community College	Deschutes CSD 1
Wallowa County		Deschutes CSD 2J
Wallowa, City of	School Districts (294)	Deschutes CSD 6
Warrenton, City of	Alliance Charter Academy	Douglas County ESD
Wasco County	Amity School District	Douglas CSD 1
Wasco County Soil and Water Conservation District	Arco Iris Spanish Immersion Charter School	Douglas CSD 105
Washington County	Armadillo Technical Institute	Douglas CSD 116
Washington County Consolidated Communications Agency	Baker CSD 16J	Douglas CSD 12
West Extension Irrigation District	Baker CSD 30 J	Douglas CSD 130
West Linn, City of	Baker CSD 5J	Douglas CSD 15
West Multnomah Soil and Water Conservation District	Baker CSD 61	Douglas CSD 19
West Side Fire District	Baker Web Academy	Douglas CSD 21
West Slope Water District	Beaverton School District 48J	Douglas CSD 22
West Valley Fire District	Bend International School	Douglas CSD 32
West Valley Housing Authority	Benton CSD 17J	Douglas CSD 34
Western Lane Fire and EMS Authority	Benton CSD 1J	Douglas CSD 4
Westfir, City of	Benton CSD 509J	Douglas CSD 70
Weston Cemetery District	Benton CSD 7J	Douglas CSD 77
Weston, City of	Bridge Charter Academy	Eagle Charter School
Wheeler, City of	Butte Falls School District	EagleRidge High School
Wickiup Water District	Cannon Beach Academy	Eddyville Charter School
Willamina, City of	Cascade Heights Public Charter School	Eola Hills Charter School
	Cascade School District #5	Estacada Web and Early College Academy 1
	Center For Advanced Learning	Forest Grove Community School
	Central Curry School District 1	Fossil School District 21J
	City View Charter School	
	Clackamas Charter Alliance 1	

Statistical Section

Gervais School District #1	Lane CSD 28J	North Santiam School District 29J
Gilliam CSD 3	Lane CSD 32	North Wasco CSD 21
Grant County ESD	Lane CSD 40	Northwest Regional ESD
Grant CSD 16J	Lane CSD 45J3	Opal School
Grant CSD 17	Lane CSD 4J	Oregon Charter Academy
Grant CSD 4	Lane CSD 52	Oregon Connections Academy at Prairie City
Grant CSD 8	Lane CSD 66	Oregon Family School
Grant School District 3	Lane CSD 68	Oregon Virtual Academy
Greater Albany Public Schools 8J	Lane CSD 69	Oregon Virtual Education East
Harmon Academy	Lane CSD 71	Oregon Virtual Education West
Harney CSD 10	Lane CSD 76	Personalized Learning, Inc.
Harney CSD 13	Lane CSD 79J	Phoenix School, The
Harney CSD 16	Lane CSD 90	Polk CSD 13J
Harney CSD 28	Lane CSD 97J	Polk CSD 2
Harney CSD 3	Le Monde Immersion Charter School	Polk CSD 21
Harney CSD 4	Lewis and Clark Montessori Charter School	Polk CSD 57
Harney CSD 5	Lincoln CSD	Portland Village School
Harney CSD 7	Linn Benton Lincoln ESD	Powell Butte Community Charter School
Harney CSD UH1J	Linn CSD 129J	Renaissance Public Academy
Harney ESD Region 17	Linn CSD 55	Ridgeline Montessori Public Charter School
Harrisburg School District 7	Linn CSD 552C	River's Edge Academy Charter School
High Desert Education Service District	Linn CSD 9	Sage Community School
Hillsboro School District 1J	Linn CSD 95C	Salem-Keizer Public Schools
Hood River CSD	Logos Public Charter School	Sand Ridge Charter School
Hope Chinese Charter School	Lourdes Charter School	Sauvie Island School
Howard Street Charter School, Inc.	Luckiamute Valley Charter School	Scappoose School District 1J
Inavale Community Partners	Madrone Trail Public Charter School	Sheridan AllPrep Academy
Insight School Of Oregon Charter	Malheur CSD 12	Sheridan Japanese School Foundation
Intermountain ESD	Malheur CSD 26C	Sherman CSD
Ione School District	Malheur CSD 29	Sherwood Charter School
Jackson CSD 35	Malheur CSD 61	Siletz Valley Early College Academy
Jackson CSD 4	Malheur CSD 66	Siletz Valley School
Jackson CSD 5	Malheur CSD 81	Silver Falls School District
Jackson CSD 549C	Malheur CSD 84	Sisters Web and Early College Academy #3
Jackson CSD 59	Malheur CSD 8C	South Coast ESD Region 7
Jackson CSD 6	Malheur ESD Region 14	South Columbia Family School
Jackson CSD 9	Marion CSD 103C	South Harney School District 33
Jackson CSD 94	Marion CSD 14CJ	South Wasco County School District 1
Jefferson County ESD	Marion CSD 15	Southern Oregon ESD
Jefferson CSD 4	Marion CSD 45	Springfield Academy Of Arts & Academics
Jefferson CSD 41	Marion CSD 91	Springwater Environmental Sciences School
Jefferson CSD 509J	Mastery Learning Institute	Summit Learning Center
Jefferson CSD 8	Metro East Web Academy	Sunny Wolf Charter School
Jordan Valley School District 3	Molalla River Academy	Sweet Home Charter School
Josephine County UJ School District	Molalla River School District	The Cottonwood School of Civics and Science
Josephine CSD 7	Morrow CSD	The Emerson School
Kairos PDX	Mosier Community School	The Ivy School
Kings Valley Charter School	Multisensory Institute Teaching Children	The Lighthouse School
Klamath CSD CU	Multnomah Learning Academy	The Valley School of Southern Oregon
Klamath Falls City Schools	Multnomah County ESD	The Village School
Knappa School District #4	Multnomah CSD 1	Three Rivers Charter School
Knova Learning Oregon	Multnomah CSD 10	Tillamook CSD 101
Lake County ESD	Multnomah CSD 28-302 JT	Tillamook CSD 56
Lake CSD 11C	Multnomah CSD 3	Tillamook CSD 9
Lake CSD 14	Multnomah CSD 39	Trillium Charter School
Lake CSD 18	Multnomah CSD 51JT	Umatilla County Administrative School
Lake CSD 21	Multnomah CSD 7	District 1R
Lake CSD 7	Multnomah CSD R-40	Umatilla CSD 16R
Lane County ESD	Nixya'aawii Community School	Umatilla CSD 29RJ
Lane CSD 1	North Central ESD	Umatilla CSD 2R
Lane CSD 19	North Powder School District	Umatilla CSD 5

Umatilla CSD 29RJ	Valley Inquiry Charter School	Washington CSD 88J
Umatilla CSD 2R	Wahtonka Community School	West Lane Technical Learning Center
Umatilla CSD 5	Wallowa County Region 18 ESD	Wheeler CSD 55U
Umatilla CSD 61R	Wallowa CSD 12	Wheeler CSD 1
Umatilla CSD 6R	Wallowa CSD 21	Willamette Connections Academy
Umatilla CSD 7	Wallowa CSD 54	Willamette ESD
Umatilla CSD 80R	Wallowa CSD 6	Woodland Charter School
Umatilla CSD 8R	Wasco CSD 29	Yamhill CSD 1
Union CSD 1	Washington CSD 13	Yamhill CSD 29JT
Union CSD 11	Washington CSD 15	Yamhill CSD 30-44-63J
Union CSD 15	Washington CSD 23J	Yamhill CSD 40
Union CSD 23	Washington CSD 511JT	Yamhill CSD 48J
Union CSD 5		

Participation of Employers in Defined Benefit and Other Postemployment Benefit Plans

Defined Benefit Pension Plan - all 898 employers participate

RHIA OPEB Plan - all 898 employers participate

RHIPA OPEB Plan - all 108 state agency employers participate (see page 175)

OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

